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City Of Lawndale

GENERAL PLAN

Recommended for Adoption
by the Planning Commission
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CITY OF LAWNDALE
1992 General Plan

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NOTES FOR A SYMPOSIUM
ON THE HISTORY OF THE
UNITED STATES

The following notes are intended to provide a general overview of the history of the United States, from the early colonial period to the present. The notes are organized into several sections, each dealing with a different aspect of the country's development.

Early Colonial Period (1600-1700)

The early colonial period was characterized by the establishment of permanent settlements in North America. The first English colony, Jamestown, was founded in 1607. Other early colonies included Plymouth (1620) and the Massachusetts Bay Colony (1630). The colonies were primarily engaged in agriculture and trade with England.

Revolutionary War (1775-1783)

The Revolutionary War was fought between the thirteen original colonies and Great Britain. The war began in 1775 and ended in 1783 with the signing of the Treaty of Paris. The war resulted in the colonies gaining independence from Britain.

Early National Period (1783-1800)

The early national period was a time of rapid growth and development for the young nation. The Constitution was ratified in 1787, and the federal government was established. The period also saw the expansion of the territory of the United States, as new states were admitted to the Union.

Antebellum Period (1800-1860)

The antebellum period was a time of significant social and economic change. The industrial revolution was in full swing, and the economy was growing rapidly. However, the period was also marked by the growing divide between the North and the South over the issue of slavery.

Civil War (1861-1865)

The Civil War was fought between the Union and the Confederacy. The war began in 1861 and ended in 1865 with the Union's victory. The war resulted in the abolition of slavery and the preservation of the Union.

Reconstruction (1865-1877)

The Reconstruction period was a time of rebuilding and reform. The federal government sought to reintegrate the Southern states into the Union and to ensure the rights of African Americans. The period ended in 1877 with the Compromise of 1877.

Progressive Era (1890-1920)

The Progressive Era was a time of social and political reform. Reformers sought to address the problems of the industrial revolution, such as poverty, corruption, and the treatment of workers. The period saw the passage of many important laws, including the Sherman Antitrust Act and the Pure Food and Drug Act.

World War I (1914-1918)

World War I was fought between the United States and Germany. The war began in 1914 and ended in 1918 with the United States' victory. The war resulted in significant changes to the world, including the end of the European empires and the rise of the United States as a world power.

Interwar Period (1918-1939)

The interwar period was a time of relative peace and economic growth. The United States emerged from World War I as a major world power. However, the period was also marked by the Great Depression, which began in 1929 and lasted until 1939.

World War II (1939-1945)

World War II was fought between the United States and Germany. The war began in 1939 and ended in 1945 with the United States' victory. The war resulted in significant changes to the world, including the end of the European empires and the rise of the United States as a world power.

Postwar Period (1945-1960)

The postwar period was a time of rapid growth and development. The United States emerged from World War II as a major world power. The period saw the expansion of the economy and the growth of the middle class.

1960s (1960-1969)

The 1960s was a time of significant social and political change. The civil rights movement was in full swing, and the Vietnam War was being fought. The period also saw the rise of the counterculture movement and the assassination of President John F. Kennedy.

1970s (1970-1979)

The 1970s was a time of economic stagnation and social unrest. The United States was in a recession, and the Vietnam War was still being fought. The period also saw the rise of the environmental movement and the Watergate scandal.

1980s (1980-1989)

The 1980s was a time of economic growth and political conservatism. The United States emerged from the recession of the 1970s as a major world power. The period saw the rise of the Reagan Revolution and the end of the Vietnam War.

1990s (1990-1999)

The 1990s was a time of economic growth and political change. The United States emerged from the recession of the 1980s as a major world power. The period saw the rise of the Clinton administration and the end of the Vietnam War.

2000s (2000-2009)

The 2000s was a time of economic growth and political change. The United States emerged from the recession of the 1990s as a major world power. The period saw the rise of the Bush administration and the end of the Vietnam War.

2010s (2010-2019)

The 2010s was a time of economic growth and political change. The United States emerged from the recession of the 2000s as a major world power. The period saw the rise of the Obama administration and the end of the Vietnam War.

2020s (2020-2029)

The 2020s was a time of economic growth and political change. The United States emerged from the recession of the 2010s as a major world power. The period saw the rise of the Biden administration and the end of the Vietnam War.

The City of Livelihood General Plan

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I. INTRODUCTION AND OVERVIEW

The City of Lawndale General Plan

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LAND USE ELEMENT

II. COMMUNITY DEVELOPMENT

1. Land Use Element

Introduction

Overview

Lawndale's Land Use Element has the broadest scope of all the General Plan Elements. It portrays the Community's desired future direction through a series of goal statements, policies and implementation programs. In order to create a comprehensive set of land use guidelines, the Element takes into account all of the General Plan's goals and policies. It also provides a policy framework to guide the physical development of the City.

Land use goals and policies direct the course of growth and development in the City, creating a functional and aesthetic land use pattern. For example, policies define guidelines for land use classifications with corresponding densities and indicating desired uses within the City. Policies also establish relationships between residential and non-residential uses. Land use goals and policies influence the character and image of the City more than any other single element.

The Lawndale Land Use plan arranges the Element's land use classifications into a functional pattern. This plan is included as part of the Element. It will also serve to illustrate the arrangement of land uses that would occur at projected "build-out" in the year 2010. It does not, however, establish specific time frames for the phasing of development.

Authority

Government Code Section 65302(a) requires the Land Use Element address the following topics through development policies.

- The amount, location, distribution, density and intensity of each land use proposed by the plan.
- Compatibility of new development on surrounding land use and infrastructure.
- Development regulations for open space.
- The location, acquisition, development and management of public and private parks and recreation areas.
- The location of schools and future use of surplus schools.

- The development, maintenance and location of existing and projected public facilities including building and infrastructure.
- The relationship between the distribution of land use and local capital improvement programs.

Organization

The Land Use Element is organized to first provide an assessment of the existing land use conditions in Lawndale. The assessment is followed by the land use plan, graphically illustrating the pattern of land use classifications. Build-out projections based on acreage, unit counts and anticipated populations of the land use classifications are described on Table 1. The City's goals and policies follow next. The goal statements represent the Community's values and the future direction of the City. Each goal is followed by policies which will guide the City's decision making. The Element concludes with a set of implementation programs.

Land Use Assessment

The City of Lawndale, an urbanized area, encompasses 1241.1 gross acres, or 1.9 square miles. The City's 1990 population was 27,331, a 14.4 percent increase since 1980. Historically, the City has been a bedroom community of primarily single family homes. Over the last twenty years (1970-1990) however, many older single-family homes have been replaced with duplexes and multi-family projects of three or more units. Lawndale has also become predominately a City of renters. Overall, the land use pattern in the City has not changed significantly from the existing conditions described in the 1976 General Plan.

Residential

Residential uses make up approximately half of Lawndale's land area. The predominate residential use is single-family homes on individual lots. This classification includes approximately 24 percent of the land area within the City.

Two residential detached units on a single lot is the next largest residential use, comprising an estimated 18 percent of the City. Multi-family dwellings having three units or more per lot comprise three percent of the City while seven percent of the City is in multi-family projects of four or more units per lot.

Replacement of older single-family homes with duplexes or additions of extra units has occurred without significant alteration of lot configurations. Since Lawndale's original single-family lots tend to be narrow, 40 feet wide by 140-150 feet long, some have been consolidated to create small condominium projects consisting of 6 to 10 units. Other

lots retained their original unit and added additional units in the rear portions of the site.

The change from single-family homes to duplexes, garden apartments and condominiums has increased the densities within the City, impacting infrastructure, parking and circulation. It has also resulted in a mixture of older structures adjacent to new structures. Replacement of older single-family units with higher density projects has occurred throughout the City.

Commercial

Commercial/office professional land uses occupy approximately 107 acres, or 8.5 percent of Lawndale. Of the 107 acre commercial area, nearly 18 acres are devoted to auto related uses and 18 acres are used for office professional purposes. The remaining 71 acres is made up of a mixture of retail, wholesale and other commercial uses.

Lawndale's primary commercial area is located along Hawthorne Boulevard, a six-lane north-south major arterial through the center of the City. Many of the commercial uses on Hawthorne Boulevard tend to be small businesses occupying older buildings.

The remaining commercial areas of Lawndale are located along Artesia and Redondo Beach Boulevards with smaller areas along Inglewood, Prairie and Rosecrans Avenues. These commercial areas have developed in a similar pattern as Hawthorne Boulevard, but at a smaller scale. Lawndale's office-professional uses are located primarily on Hawthorne Boulevard.

Industrial












Industrial uses in Lawndale are currently limited to light manufacturing and related uses, on more than 13 acres. These uses are predominately located in two areas. The largest industrial area is located on the northeast corner of Inglewood Avenue and Manhattan Beach Boulevard, just south of the 405 Freeway. Other industrial uses are located along Grevillea Avenue, south of Marine Avenue. Isolated industrial uses are distributed throughout the City, as on Marine Avenue, east of Hawthorne Boulevard. Lawndale's industrial uses consist mainly of light warehousing, furniture assembly, welding and sheet metal operations.

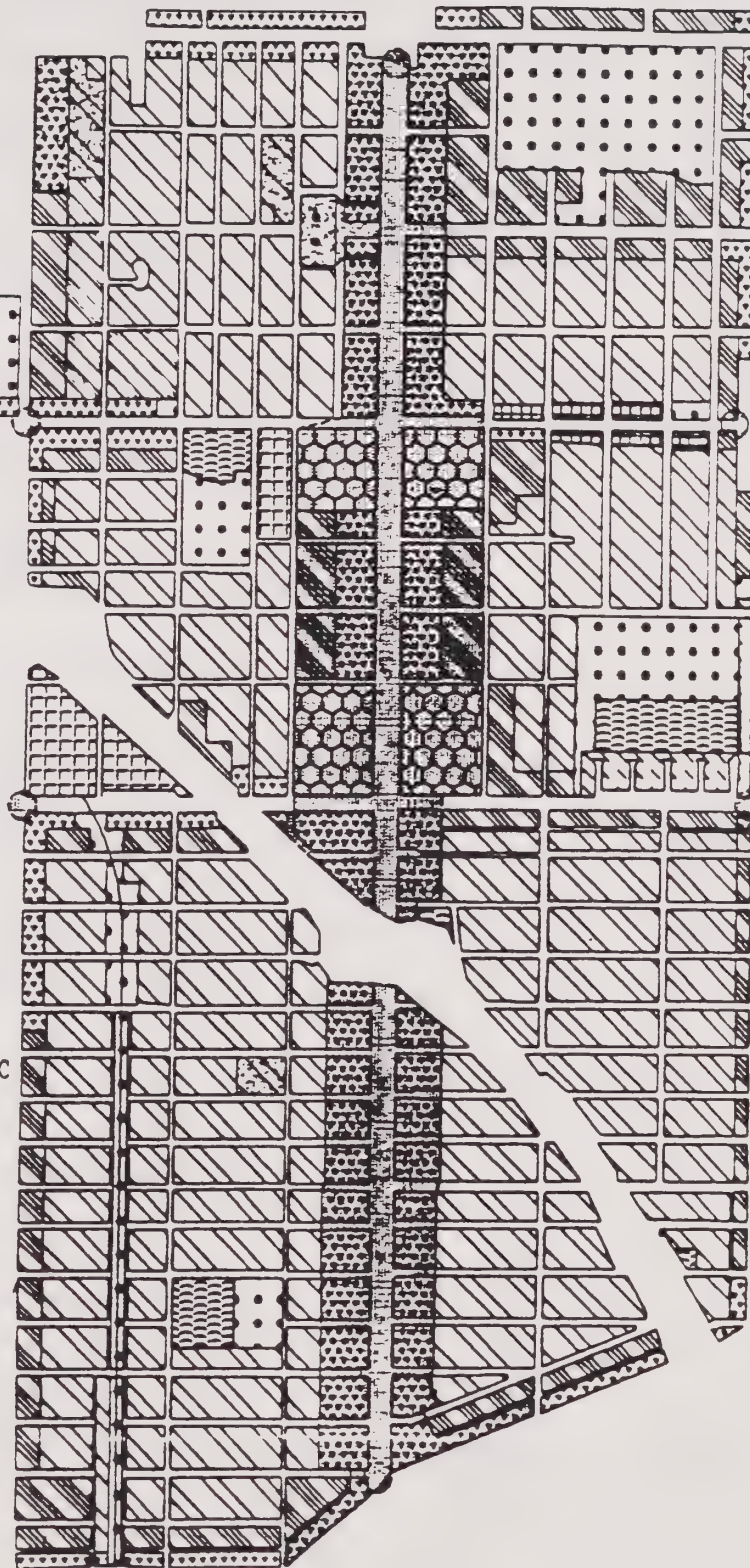
Public Open Space

Lawndale has less than one acre of City owned public open space/parks, which includes the Hogan tot-lot and the Community Garden. The City relies on a Joint Powers Agreement with the Lawndale School District to provide most of its improved recreational open space. The Rogers/Anderson, Jane Addams and William Green Elementary

EXHIBIT "B"

LEGEND

-  RES. SF LOW 8.9-17.6 DU/AC
-  RES. SF MEDIUM 8.9-17.6 DU/AC
-  RES. MF LOW 8.9-17.6 DU/AC
-  RES. MF MED 17.6-33.0 DU/AC
-  Downtown Commercial
-  COMMERCIAL
-  INDUSTRIAL
-  OPEN SPACE
-  PUBLIC FACILITIES/SCHOOLS
-  PUBLIC FACILITY OVERLAY
Schools, Open Space and
Civic Uses
-  HAYTHORNE BLVD. SF OVERLAY



Land Use Plan

Schools reserve approximately five acres of each school site to be used as public parks during off school hours. Currently, the City is pursuing the extension of Joint Powers Agreements for William Green and Jane Addams schools (See Open Space Element).

Public Facilities

Public facilities comprise 141 acres of Lawndale. Public facility uses include school sites, excluding the portions used for public parks, Lawndale and Los Angeles County maintenance yards, Southern California Edison substation, the Civic Center complex and the AT & SF railroad right-of-way.

Streets and Vacant Land

Approximately 327 acres or 26 percent of the City is in improved streets and alleyways. The remaining 9.1 acres of Lawndale's land area is comprised of privately-owned vacant land.

Table 1
Distribution of Existing Land Uses

Land Use Category	Acres	Units	Population
Residential			
Single-Family Low 0-8.9 du/ac	246.8	1,825	5,100
Single-Family Medium 8.9-17.6 du/ac	45.0	500	1,401
Multi-Family Low 8.9-17.6 du/ac	228.5	3,500	9,800
Multi-Family Medium 17.6-49.0 du/ac	83.0	2,230	6,240
Multi-Family High 49.0-58.0 du/ac	24.0	1,723	4,790
Residential Subtotal	627.3		
Commercial			
General	106.6		
Specialty	0.0		
Urban Village	0.0		
Industrial	13.8		
Public Facility/School	141.6		
Open Space	15.5		
Vacant	9.1		
Street/Alley	327.2		
Totals	1,241.1	9,778	27,331

Table 2

Land Use Plan Estimated Buildout Projections

<u>Land Use Category</u>	<u>Acres</u>	<u>Units</u>	<u>Population</u>
Residential			
Single-Family Low 0-8.9 du/ac	7.0	62	174
Single-Family Medium 8.9-17.6 du/ac	46.0	810	2,268
Multi-Family Low 8.9-17.6 du/ac	407	7,163	20,056
Multi-Family Medium 17.6-33 du/ac	116	3,828	10,718
Residential Subtotal	576.0		
Commercial			
General	150.0		
Specialty	0.0		
Downtown Commercial	35.0		
Industrial	21.4		
Public Facility/School	115.5		
Open Space	15.5		
Street/Alley	<u>325.7</u>		
Totals	1,239.1	11,863	33,216

Land Use Plan

The Land Use Plan for the City of Lawndale is comprised of a variety of land uses that are described below. The various land uses are graphically summarized on the Land Use map (see Exhibit A). The land uses were arranged in an order to protect and enhance the existing neighborhoods, help revitalize underutilized areas and provide the necessary public facilities and services to create a vital, attractive and well balanced community.

Residential Designations

Single-Family Low Density

Permits a density range of 0-8.9 dwelling units per acre. This category is intended for single-family detached units on a minimum 5,000-square foot lot. Permits single-family detached homes and ancillary uses.

Single-Family Medium Density

Permits a density of 8.9-17.6 dwelling units per acre. This category is only intended to be applied to the areas of Lawndale where the predominate use is existing single-family units on 2,500-square foot lots. Permits single-family detached homes on 2,500-square foot lots on 2,500-square foot lots and ancillary uses.

Multi-Family Low Density

Permits a density of 8.9 dwelling units per acre to 17.6 dwelling units per acre and allows two units on a minimum 5,000 square-foot lot. Permits single-family detached, duplex/double unit, condominiums, townhomes or any combination of the above and ancillary uses.

Multi-Family Medium Density

Permits a density range of 17.6 dwelling units per acre to 33 dwelling units per acre, on a minimum 5,000-square foot lot. Permits single-family detached, duplex/double unit, condominiums, townhomes, apartments, manufactured housing or any combination of the above if deemed appropriate and compatible with surrounding land uses and ancillary uses.

The residential unit types are defined as follows:

Single-Family Detached

A detached structure containing one dwelling unit on a legally subdivided lot.

Duplex/Double Unit

Two dwelling units attached by a common wall or two detached units (double units) on one legally divided lot. This unit type is an infill product on existing lots where the primary unit has been retained.

Condominiums

A structure or group of structures containing two or more dwelling units with common walls on a single property. Subdivision of the property may exist to permit ownership of airspace in the form of a dwelling unit with an undivided share in common elements.

Townhome

An architectural style that consists of a dwelling unit which is stacked vertically, usually over a garage, and no other unit is over or under the living area. This unit type can be either attached or detached.

Apartments

A structure or group of structures containing three or more units which are rented or leased in time periods of 30 consecutive calendar days or longer.

Manufactured Housing

A detached structure containing one dwelling unit that is constructed elsewhere and transported and assembled on-site.

Commercial Designations

The following commercial designations describes the types of commercial uses as well as the appropriate floor area ratio for commercial development. Floor area ratio is defined as the gross floor area of a building or buildings on a lot divided by the gross lot area or site area.

General Commercial

This designation provides the community with a wide variety of retail shop, restaurants, services and office uses to meet the daily needs of the residents. The permitted floor area ratio, not to exceed 1.0, unless modified by the Hawthorne Boulevard Corridor Specific Plan.

Downtown Commercial

The purpose of this designation is to encourage urban nodes with commercial activity. This designation is applied specifically to the northerly side of the Hawthorne Boulevard and Manhattan Beach Boulevard intersection, and on the southerly side of the Marine Avenue and Hawthorne Boulevard intersection (see Hawthorne Boulevard Corridor Specific Plan).

Specialty Commercial

This designation can apply to sites that are a minimum five (5) acres in size and are located so as to be easily accessible and visible from major transportation corridors. The uses should have a central theme and attract customers from outside the City as well as within Lawndale. Examples of suitable specialty commercial uses are a complex of stores catering to major household purchases, such as furniture, appliances, carpets, etc.; a variety of factory outlet stores; or assorted entertainment and eating establishments. The floor area ratio shall not exceed 0.3.

Industrial Designation**Light Industrial**

This designation permits light manufacturing, assembly, packaging, fabrication and processing of materials into finished products rather than the conversion of raw materials. The industrial activity shall be conducted primary within structures and outside storage areas and

assembly activity should be limited. The floor area ratio shall not exceed 0.5.

Open Space Designation

Open Space

This designation includes public parks, parks that are part of school sites, public and private outdoor recreational facilities, and landscaped open space areas.

Public Facilities Designation

Public Facilities

This category includes:

- Public School Sites
- Atchison, Topeka and Santa Fe Railroad Right-of Way
- Civic Center
- Public Maintenance Yards
- Utility Easements
- Library
- Prairie Avenue Recreation Center

Public Facilities Overlay

This overlay is intended to identify existing and potential sites that are suitable for a public park, recreational facility, or any other public facility building or use. In the area adjacent to the Civic Center, this overlay is intended to identify areas where possible expansion of City Hall and/or future public uses can occur.

Goals and Policies

Goal 1. Community Enhancement

Preserve and enhance the environment, values, aesthetic character, and image of Lawndale as a vital, attractive, desirable and safe urban community.

Policy 1a

Maintain the existing residential development pattern, except in locations along major transportation corridors and public centers where commercial or higher density residential uses are more appropriate.

Policy 1b

Monitor the impact of land uses to ensure that the City's infrastructure system, public services and facilities are not over burdened beyond design capacity.

Policy 1c

Promote the Hawthorne Boulevard Corridor Specific Plan in order to revitalize commercial, residential uses and pedestrian oriented activities, through the use of Urban Village nodes.

Policy 1d

Promote development of architectural design guidelines for residential, commercial and industrial land uses.

Policy 1e

Promote a comprehensive City-wide landscape program for public streets.

Policy 1f

Investigate, and actively pursue and enforce programs for property rehabilitation.

Policy 1g

Encourage and assist, where possible, the undergrounding of utility lines and pursue the formation of "Underground Utility Districts".

Policy 1h

Encourage property owners to become more involved in community enhancement efforts.

Policy 1i

Encourage the enhancement and/or creation of private and public open space areas.

Policy 1j

Improve Lawndale's City identification signage program.

Policy 1k

Encourage the renovation and/or expansion of public buildings, where appropriate.

**Goal 2.
Community
Character**

The City should promote community character by encouraging compatible land use and design in respect to location, timing, and density.

Policy 2a

The use of land shall be at an appropriate density based upon compatibility with the majority of surrounding existing land uses.

Policy 2b

In order to minimize conflicts with adjacent land uses, adequate setbacks, buffering and/or innovative site design shall be required.

Policy 2c

The use of land shall include design features which create a positive visual impact for the surrounding area.

Policy 2d

The City shall notify adjacent jurisdictions and agencies of proposed land use actions that may affect them and take appropriate action to address their concerns.

**Goal 3.
Land Use Patterns
and Infrastructure**

The land use pattern and population of Lawndale should be consistent with the capability of existing and planned public services and facilities.

Policy 3a

The number of dwelling units in the City shall be limited to those which can be adequately served by public services or facilities.

Policy 3b

The City shall keep current information concerning the capability of public services and facilities it provides.

Policy 3c

The City shall encourage other public service agencies to keep current information regarding their capabilities.

Policy 3d

The City shall review and update the City Zoning Ordinance and other City implementation documents so as to be in conformance with the General Plan.

**Goal 4.
Public Health and
Safety**

The distribution and uses of land should consider the health, safety and welfare of the community.

Policy 4a

Continue to evaluate acceptable level of risk to the public health, safety, and general welfare and adjust policies accordingly.

Policy 4b

The use of land shall not subject people to potential sources of objectionable noise, light, or other emissions or to exposure to toxic or other dangerous materials.

Policy 4c

Provide available information and encourage education of seismic, geological, fire, and other hazards.

Policy 4d

Seismic and geological hazards shall be considered when making land use decisions.

Policy 4e

Places of public assembly shall be designed with adequate, well marked emergency exits and have public address systems which would not be rendered inoperable due to a fire or other emergency.

Policy 4f

Develop and encourage the use of accessible recycling programs for the residents.

Policy 4g

Evaluate needs of disabled persons and provide services so they can be fully integrated into the community.

Policy 4h

Encourage businesses to provide on-site child-care program for their employees and financially assist child-care programs, where feasible.

**Goal 5.
Community Design**

All proposed land development shall provide quality site design and architectural features as well as demonstrate compliance with General Plan Guidelines and Implementation Ordinances.

Policy 5a

No proposed division of land or real property shall be created which fails to implement the General Plan, City policies, ordinances or development standards.

Policy 5b

A subdivision or consolidation of land or real property must provide adequate on-site improvements consistent with the General Plan.

Policy 5c

A subdivision of land or real property must include provisions for off-site improvements or the payment of fees for off-site improvements consistent with the General Plan.

Policy 5d

The placement of proposed structures, landscaping, access ways, etc., shall be oriented in such a manner as to maximize access to sunlight and natural airflow between buildings.

Policy 5e

A combination of structural sound attenuation techniques, landscaped setback areas, berms and decorative sound attenuation walls shall be required where development abuts major transportation corridors.

Policy 5f

New development shall provide coordinated site design whenever possible with existing or proposed adjacent land uses, to provide complimentary site design and unified circulation access.

Policy 5g

Street lights, parking meters, mail boxes, benches, etc. shall be designed to enhance the streetscape and adjoining land uses.

Policy 5h

All development shall provide adequate on-site parking, or participate in the development of sufficient aggregate parking areas in accordance with the Hawthorne Boulevard Corridor Specific Plan.

Policy 5i

Front, side, and rear yard setbacks shall be measured from the property line, excluding any public right-of-way.

Policy 5j

When a legal matter is pending regarding ownership, lot lines, etc., no projects shall be approved until the matter has been resolved and documented.

Policy 5k

Project landscaping should be designed to include drought tolerant, native California plant species and the use of a drip, micro-spray or other low-flow irrigation systems.

Policy 5l

Architectural design shall enhance the neighborhood, community values and City image.

Goal 6.**Residential Uses**

Residential development shall conform to the land use classifications identified on the Land Use Plan to ensure proper density, housing type and location, for protection and enhancement of established neighborhoods as well as a balanced, functional community.

Policy 6a

The single-family low density designation shall permit a density range of 0-8.9 dwelling units per acre and is intended for single-family detached units on a minimum 5,000-square foot lot. The permitted housing type is single-family detached.

Policy 6b

The single-family medium density designation shall permit a density of 8.9-17.6 dwelling units per acre and is intended to be applied to only the areas of Lawndale where the predominate use is existing single-family units on 2,500-square foot lots. The permitted housing type is single-family detached.

Policy 6c

The multi-family low density classification shall permit a density of 8.9 dwelling units per acre to 17.6 dwelling units per acre and allows two units on a minimum 5,000 square-foot lot. The housing types permitted are single-family detached, duplex/double unit, townhomes, condominiums, or any combination of the above.

Policy 6d

The multi-family medium density category shall permit a density range of 17.6 dwelling units per acre to 33.0 dwelling units per acre, with up to four units on a minimum 5,000-square foot lot. Usable private and common open space shall be provided. The housing types permitted are single-family detached, duplex/double unit, condominiums, apartments, townhomes, manufactured housing or any combination of the above if deemed appropriate and compatible with surrounding land uses.

Policy 6f

The City shall strive to maintain a reasonable balance between rental and ownership housing opportunities. This balance also applies to senior and family housing.

Policy 6g

The City shall protect, encourage and where feasible, provide housing opportunities for low and moderate income households, as well as for the homeless.

Goal 7.
Commercial
Uses

Encourage the establishment of commercial development which contributes positively to the City image and identity as well as generates revenues and employment opportunities.

Policy 7a

The general commercial designation shall provide the community with a wide variety of retail shops, restaurants, services and office uses to meet the daily needs of the residents.

- Office uses shall be encouraged on second story/upper story of commercial buildings.
- A balance of commercial uses shall be encouraged to serve the needs of the residents.

Policy 7b

The Downtown Commercial designation shall encourage commercial nodes with commercial activity. The following criteria shall apply to the Downtown Commercial designation.

- A central theme with complimentary commercial uses are encourage (i.e., a variety of eating and entertainment establishments).
- Where appropriate, walkways, arcades, plazas, courtyards and other pedestrian oriented design features shall be provided to encourage pedestrian movement within the project.
- Mass transit stops shall be encouraged in closed proximity to the nodes.
- Parking shall be encouraged to be place underground, within structures and/or in the rear of buildings to avoid large parking areas along Hawthorne Boulevard.

Policy 7c

The Specialty Commercial designation can apply to sites that are a minimum five (5) acres in size and are located so as to be easily accessible and visible from major transportation corridors. The uses should have a central theme and attract customers from outside the City as well as within Lawndale.

Policy 7d

Commercial site design shall include the following criteria:

- Adequate setbacks, buffers or screening when adjacent to a non-commercial use.
- Encourage providing landscaped open space areas such as plazas, courtyards, etc.
- Landscaping shall incorporate areas for benches, trash receptacles, bicycle racks and other forms of street furniture where appropriate.
- Shared access with adjacent uses shall be encouraged.
- Phasing of commercial projects shall be permitted to allow initial development and expansion in response to demographic and economic changes. Site design shall illustrate the ultimate development of the property and/or demonstrate the ability to coordinate and integrate with surrounding commercial uses.
- Signage shall be tasteful and compliment the architectural style of the project and be in conformance with adopted City sign programs and the Hawthorne Boulevard Corridor Specific Plan Guidelines, if within the overlay area.
- Sufficient parking shall be provided to serve all the proposed and probable uses.

Policy 7e

Commercial architecture shall emphasize establishing identity to businesses while representing tasteful and visually appealing design that is compatible with the surrounding structures.

Policy 7f

The City shall encourage commercial revitalization and economic growth along Hawthorne Boulevard. However, no eminent domain would be utilized for private development or redevelopment.

Goal 8.**Industrial Uses**

Promote light industrial uses which are consistent with the community enhancement goals and policies as well as increase the City tax base and encourage a balance of employment opportunities.

Policy 8a

Only light industrial uses shall be permitted.

Policy 8b

Industrial uses shall be located so as not to create adverse impacts on surrounding land uses and/or the City circulation system.

Policy 8c

Encourage development that presents an efficient, clean and visually appealing industrial environment. Architecture, landscaping, signage and development standards shall be coordinated to provide a unified site design.

Policy 8d

Each industrial use shall provide attenuating structures, devices and/or procedures to ensure that noise, vibration, glare, odors, heat and other emissions are not perceptible outside its boundaries by the natural senses.

Goal 9.**Open Space**

To provide City residents with opportunities for active and passive recreation activities through private and public open space areas, parks and recreational facilities.

Policy 9a

Existing and future public parks shall be designated as open space.

Policy 9b

The City shall identify and pursue acquisition of additional parkland.

Policy 9c

The City should continue the Joint Powers Agreements with the Lawndale School District to

**Goal 10.
Public Facilities**

To preserve, enhance and expand the land base and structures necessary to provide public services to the residents of the City of Lawndale.

Policy 10a

The Public Facilities designation shall be applied to existing public facility sites:

- Public School Sites
- Atchison, Topeka and Santa Fe Railroad Right-of-Way
- Civic Center
- Maintenance Yards
- Utility Easements
- Library
- Prairie Avenue Recreation Center

**Goal 11.
Public Facilities
Overlay**

The Public Facilities Overlays shall identify areas that possess public facility characteristics and locations needed to serve the residents of the City of Lawndale.

Policy 11a

The overlay designation shall not preclude the ability to develop the property with the underlying designation, but should encourage the development of public facilities needed to serve the community.

Policy 11b

The overlay designation is applied to the Billy Mitchell, Betsy Ross and Lucille Smith School sites. The overlay identifies each site, or a portion of each site as being suitable for a public park, recreation facilities, or public facility uses.

Policy 11c

The area between the existing Civic Center and Hawthorne Boulevard shall be designated with the Public Facility overlay. The overlay identifies this area as being appropriate for expansion of the existing Civic Center and/or the creation of additional public facilities uses.

LAND USE ELEMENT

use school sites as parkland.

Policy 9d

Private development shall be encouraged to provide usable common open space.

Policy 9e

Evaluate the feasibility of the AT & SF Railroad Right-of-way being converted to a linear park.

Goal 10.
Inconsistency
between
General Plan
and Zoning

Policy 9f

Whenever there is a land use conflict between a General Plan commercial designation, and the underlying residential zone, the residentially zoned properties may be expanded or improved provided that all the development standards of the underlying zone are met. The purpose is to alleviate hardships on the residentially zoned properties, to facilitate more favorable financing options for those inconsistent land uses, and to allow a residential uses to continue until such time that a conversion to a commercial use is requested by the residential property owners.

Policy 9g

The recreational facilities provided at Roger/Anderson Middle School, Jane Addams Elementary School and the William Green Elementary School shall be considered open space.

Goal 10.
Public
Facilities

To preserve, enhance and expand the land base and structures necessary to provide public service to the residents of the City of Lawndale.

Policy 10a

The Public Facilities designation shall be applied to existing public facility sites:

- Public School Sites
- Atchison, Topeka and Santa Fe Railroad Right-of-Way
- Civic Center
- Maintenance Yards
- Utility Easements
- Library
- Prairie Avenue Recreation Center

Implementation Programs

1. Community Enhancement

1.1. Hawthorne Boulevard Corridor Specific Plan

Develop public/private partnerships necessary to carry out the implementation programs specified in the Hawthorne Boulevard Corridor Specific Plan.

1.2. Property Rehabilitation

Develop and actively promote viable property rehabilitation programs. Incentive methods can include, but not be limited to:

- Low interest loans
- Contests
- Demonstration projects
- City sponsored "How To" workshops
- City sponsored rehabilitation of structures with a reimbursement guarantee from property owners

1.3. Street Tree and Landscape Program

Adopt and carry out a City-wide street tree and landscape program. The program should identify selected trees that will create separate identities in different parts of City. The City should also set up programs through local nurseries to make trees easily available.

1.4. Community Survey

Survey community values periodically to encourage more involvement from residents and to determine if the General Plan and other City document are fulfilling the residents goals for a desirable and attractive community. The survey should occur every five years, in conjunction with mandated Housing Element review.

1.5. Neighborhood Workshops

Conduct neighborhood workshops periodically. For purposes of identifying immediate and future concerns of the residents and to also create more community involvement.

1.6. City Monumentation

The City shall place coordinated City identification monuments and/or entrance landscaping at major entrance points to the City, in conjunction with the Hawthorne Boulevard Corridor Specific Plan.

2. Community Character

2.1. Site Design Standards

The City shall update their site design guidelines and policies. This update shall include but not be limited to:

- Evaluating setbacks and buffers
- Evaluating open space requirements
- Evaluating building height and bulk requirements
- Creating positive visual impacts
- Developing programs for jurisdiction notification
- Developing guidelines for compatibility within existing or proposed development

2.2. Architectural Guidelines

The City shall develop architectural design guidelines primarily for the purpose of:

- Appropriate architectural styles and techniques
- Building height and scale
- Appropriate building materials
- Architectural compatibility
- Wall and fence materials and design

2.3. Hawthorne Boulevard Corridor Design Guidelines

See the Hawthorne Boulevard Corridor Specific Plan for implementation programs.

3. Land Use Pattern and Infrastructure

3.1. Public Facilities Report

The City Public Works Department shall prepare a public facilities report evaluating and monitoring the City's infrastructure and public services delivery system.

3.2. Public Facilities Financing

Within one year after adopting the General Plan, the City shall evaluate all information regarding the financial status and options for financing infrastructure and public services. This information shall be updated yearly. Financing mechanisms the City should consider include but are not be limited to:

- Development fees
- User fees
- Special assessment
- Capital Improvement

3.3. Facilities Financing Fees

The City shall establish a fee system to assist in the financing of all necessary and desirable capital improvements and services. All fee programs shall be adopted by ordinance and reviewed once a year by the City Council.

4. Public Health and Safety**4.1. Environmental Review**

Proposed development projects shall be supported by sufficient technical data to determine consistency with General Plan policies. The determination shall include suitable findings on the physical environment including, but not limited to: traffic, air quality, noise, drainage, visual impacts, geotechnical and public facilities and services.

4.2. Dependent Care

The City shall develop child-care standards and regulations, that are flexible and encourage child care facilities in a variety of land uses.

5. Community Design**5.1. Zoning Ordinance Update**

The City shall revise and update the Zoning Ordinance to be consistent with the goals and policies of the General Plan.

5.2. Zoning/Land Use Matrix

The City shall develop a zoning and land use matrix to define compatible, as well as potential conflicting zoning and land use designations.

5.3. Subdivision Ordinance

The City shall update the Subdivisions Ordinance to be consistent with the goals and policies of the General Plan.

6. Residential Uses**6.1. Zoning Ordinance Consistency**

The City shall evaluate current residential zoning designations, as part of the zoning ordinance update, to determine adequacy for implementing the new General Plan policies. New designations may be established.

6.2. Residential Design

The City shall develop and adopt design standards regarding architecture, building height and separation.

7. Commercial Uses**7.1. Zoning Ordinance Consistency**

The City shall evaluate current commercial zoning designations, as part of the zoning ordinance update, to determine adequacy for implementing the new General Plan policies. New designations may be established.

7.2. Signage

Review and update the City's sign ordinance to ensure it reflects the City community enhancement goals and policies.

7.3. Floor Area Ratio Bonus

Evaluate increasing commercial floor area ratio if outdoor amenities and open space area far surpass Zoning Ordinance standards.

7.4. Additional Implementation Programs

Additional implementation programs can be found under the Land Use Element Community Character section and in the Hawthorne Boulevard Corridor Specific Plan and the Economic Element.

8. Industrial Uses**8.1. Zoning Ordinance Consistency**

The City shall evaluate current industrial zoning designations, as part of the zoning ordinance update, to determine adequacy for implementing the new General Plan policies. New designations may be established.

8.2. Floor Area Ratio Bonus

Evaluate increasing industrial floor area ratio if outdoor amenities and open space area surpass Zoning Ordinance standards.

8.3. Additional Programs

Additional programs can be found under the Community Character implementation programs and in the Economic Element.

9. Open Space**9.1. Railroad Right-of-Way**

Pursue discussions with Atchison, Topeka and Santa Fe Railroad regarding conversion of a portion of the right-of-way for linear park purposes.

9.2. Additional Parkland

Prioritize potential open space and parkland sites, evaluate financing or annexation options and pursue opportunities for acquisition when and where feasible.

10. Public Facilities**10.1. Financing Plan**

The City shall prepare a comprehensive financing plan to maintain and/or improve the public service facilities of the Community. Public facilities to be addressed in the financing plan shall include, but are not limited to:

- Police
- Fire
- Streets
- Parks
- Libraries

This plan shall include the following and be reviewed and updated annually.

- Projections of capital improvements necessary to maintain, improve and/or expand current facilities services.
- Projection of revenues, including development fees, which will be available to meet capital improvement needs.
- Identify necessary adjustments to fees and other revenue sources to meet public facility needs.
- Identify long-term financing methods to allow for the improvement and/or acquisition of needed facilities or service in a timely manner.

11. Public Facilities Overlay

11.1. Identification of Public Facility Sites

The City shall review, on a yearly basis, the General Plan Land Use Map in regards to identifying potential sites for future public parks or public facility buildings.

11.2. Financing Options

The City shall evaluate various financing options for the acquisition and/or expansion of park sites and public facilities. The financing mechanism can include, but not be limited to:

- General Obligation Bonds
- Special Tax
- User Fees
- Tax Increment Financing
- Special Assessments

HAWTHORNE BOULEVARD CORRIDOR SPECIFIC PLAN

II. COMMUNITY DEVELOPMENT

2. Hawthorne Boulevard Corridor Specific Plan

Introduction

Overview

Hawthorne Boulevard is the focal point of Lawndale. It is the central circulation route, commercial center, employment area and social activity center for the City. Its importance to the community is not reflected by its current condition which can be described as a mix of uses lacking common or centralized design themes.

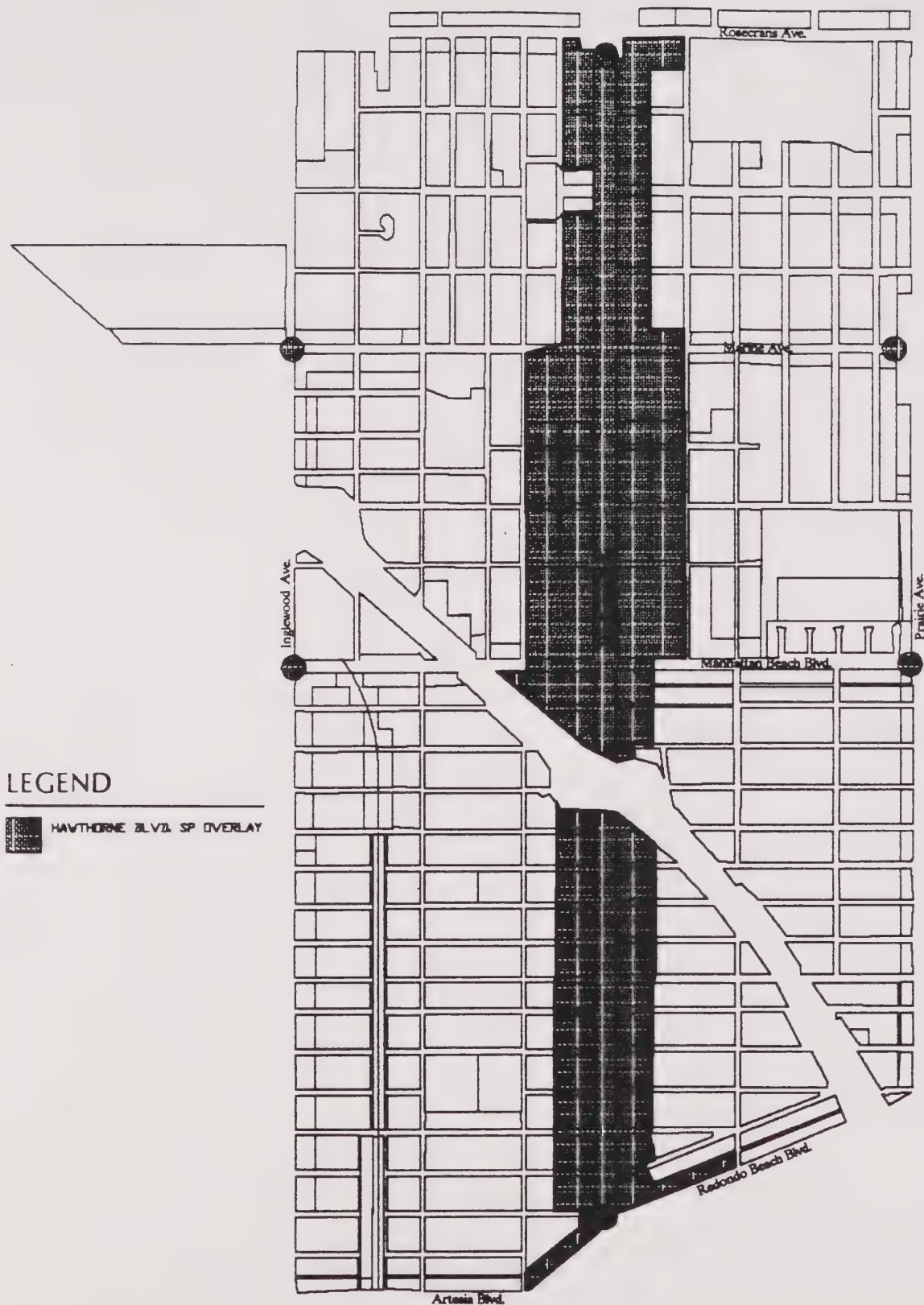
The limits of the Specific Plan Overlay are: Hawthorne Boulevard, from Rosecrans Avenue, south to Artesia Boulevard, including approximately 250 feet of area beyond the Hawthorne Boulevard right-of-way south of the 405 Freeway. North of the 405 Freeway, the limits of the plan area extend up to 550 feet east and west of Hawthorne Boulevard. The City-wide entry points at the intersection of Hawthorne Boulevard and Rosecrans Avenue, Hawthorne Boulevard and Artesia Boulevard, Marine Avenue and Prairie Avenue, Marine Avenue and Inglewood Avenue, Manhattan Beach Boulevard and Inglewood Avenue, Manhattan Beach Boulevard and Prairie Avenue and the 405 off ramp at Manhattan Beach Boulevard are also included within the limits of the plan area (see Figure A).

Although Hawthorne Boulevard is highly travelled, in excess of 60,000 vehicle trips per day, there is a general lack of business and community attractiveness due to underutilized and deteriorating structures and sites. The corridor does not portray a sense of place or strong identity for travelers or residents.

The purpose of the Hawthorne Boulevard Corridor Specific Plan Overlay is to encourage good urban design, reinvestment, improvement of the City's identity and image, as well as enhancing the Boulevard's economic vitality. The underlying mix of land uses provide for a variety of commercial and residential opportunities.

Authority

The Specific Plan Overlay has been prepared pursuant to Section 65450 of the California Government Code, authorizing the preparation and

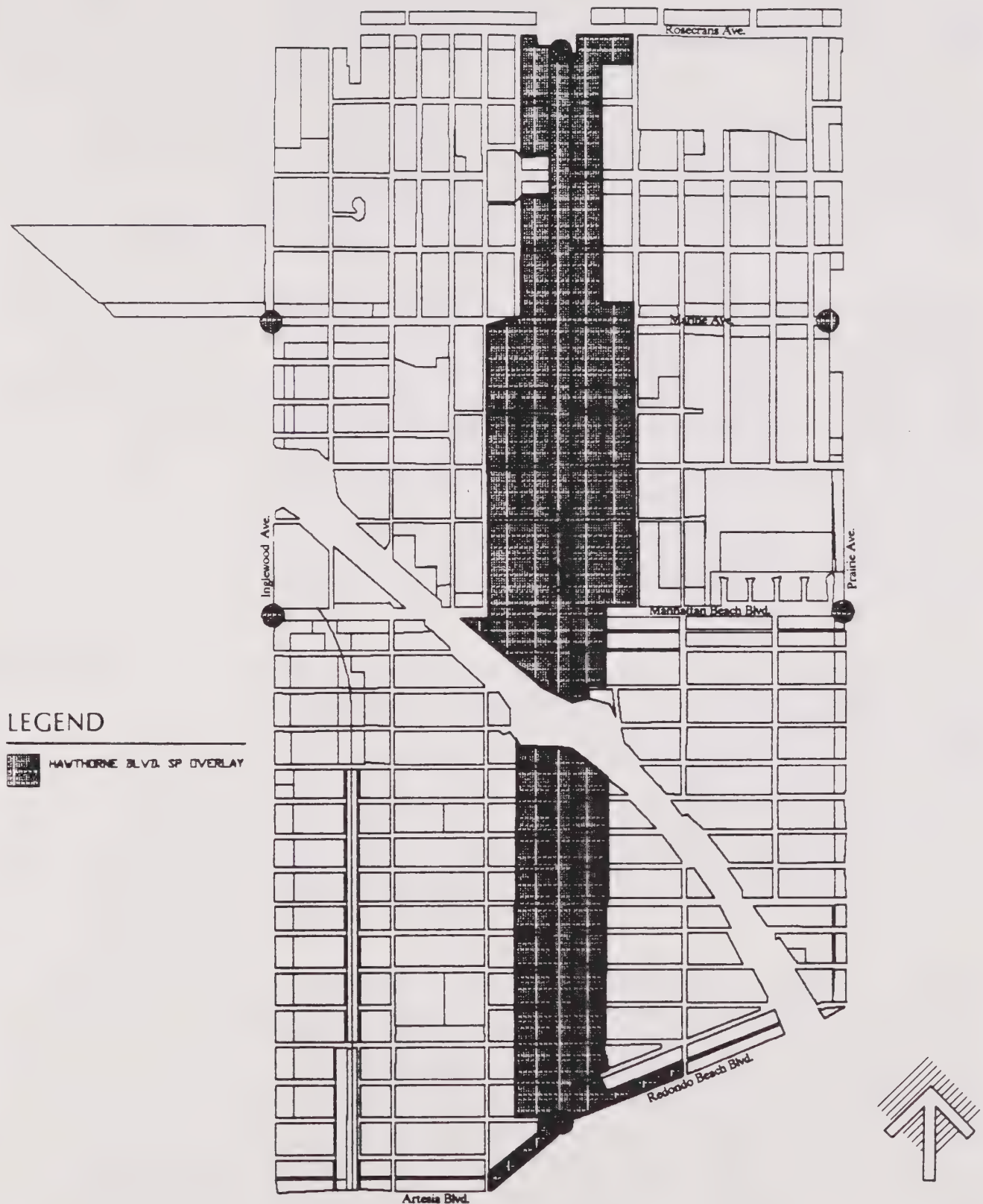


LEGEND

 HAWTHORNE BLVD. SP OVERLAY

Limits of Hawthorne Boulevard Corridor
Specific Plan

figure A



Limits of Hawthorne Boulevard Corridor
Specific Plan

figure A

adoption of Specific Plans. A Specific Plan Overlay land use designation is applied where comprehensive planning and development design guidelines are desired.

The Specific Plan Overlay, pursuant to Government Code 65454, must be consistent with the General Plan. The Hawthorne Boulevard Corridor Specific Plan Overlay is interrelated with the Land Use, Circulation and Economic Development Elements of the City of Lawndale's General Plan.

Government Code Section 65451 further mandates that Specific Plans detail standards and criteria by which development may proceed. Implementation measures must also be identified in the Specific Plan. Finally, the Government Code requires discussion and diagram of the distribution, location, and extent of uses of land and the infrastructure requirements relevant for implementation of the plan. In terms of infrastructure, the General Plan Land Use Element discusses the existing location and extent of facilities and services. This Specific Plan does address further infrastructure requirements through policy and implementation programs requiring detailed studies prior to development.

Organization

This Specific Plan is organized to present the desired improvements of the Hawthorne Boulevard Corridor. The plan begins with an assessment of the Corridor Area, followed by the explanation of the Specific Plan Overlay. The overlay works in conjunction with the underlying Land Use Element classifications. Within this same section, there is a description of four corridor districts established for urban design purposes. Each district is defined in terms of its geographic location within the plan area. The four Districts include The North, South, Central and Entryway Districts.

Following the Specific Plan Overlay section, the Hawthorne Boulevard Corridor Goal and related Policies are defined. These statements will guide the future improvements of the corridor and City-wide entry points. Closely related to the Goal and Policies are the Urban Design Guidelines. Within this section, illustrations and brief descriptions are expressed for the overall urban design concept of the plan area, including street improvements, signage, landscaping and building placement. The design elements are divided into components so that specific design themes and treatments can be developed and implemented based on the uniqueness of each district identified in this plan.

The final section of the plan deals with implementation programs, such as economic incentives. Private and public participation will be required to make the corridor plan successful.

Assessment

The Hawthorne Boulevard Corridor Specific Plan Overlay encompasses 207 acres. The corridor overlay area is located in the geographic center of Lawndale, covering the full length of Hawthorne Boulevard, from Rosecrans Avenue south to Artesia Boulevard. The plan area also includes selected City-wide entryways (Figure A).

Hawthorne Boulevard is a six lane major road with a total right-of-way width of 170 feet south of Manhattan Beach Boulevard to Artesia Boulevard and a 195 foot width from Manhattan Beach Boulevard to Rosecrans Avenue. A partially landscaped median, also utilized for parking, runs the entire length of the corridor. The parking areas within the median are underutilized and present problems of safety and aesthetics. People who park within the median must contend with high volumes of traffic and long distances between signalized intersections with cross-walks.

Many of the structures along Hawthorne Boulevard were built in the 1950's and 1960's era. Lots were created and structures constructed without benefit of community design guidelines, resulting in various sizes and shapes fronting the corridor. The structures and sites within the Specific Plan Overlay present opportunities for improvement.

In addition to the structures and sites, the large quantity and condition of signs adds to the non-unified characteristics of the plan area. The following are issues to be addressed by the plan:

- Inadequate pedestrian access from median parking area
- Non-uniform signage
- Sparse and inconsistent landscaping
- Incongruent building form, scale and design
- Lack of a community focal point or identity
- General lack of economic vitality

Specific Plan Overlay

Underlying Land Use Classifications

The Hawthorne Boulevard Corridor Specific Plan Overlay incorporates the Land Use Element map classifications for the area within the plan boundaries. As the Land Use plan illustrates (Figure B), the corridor area includes General Commercial, Multi-Family Medium Density 17.6 - 33 du/ac, and Downtown Commercial classifications. The overall distribution of land uses within the corridor area is as follows:

Table 1
Land Use Distribution

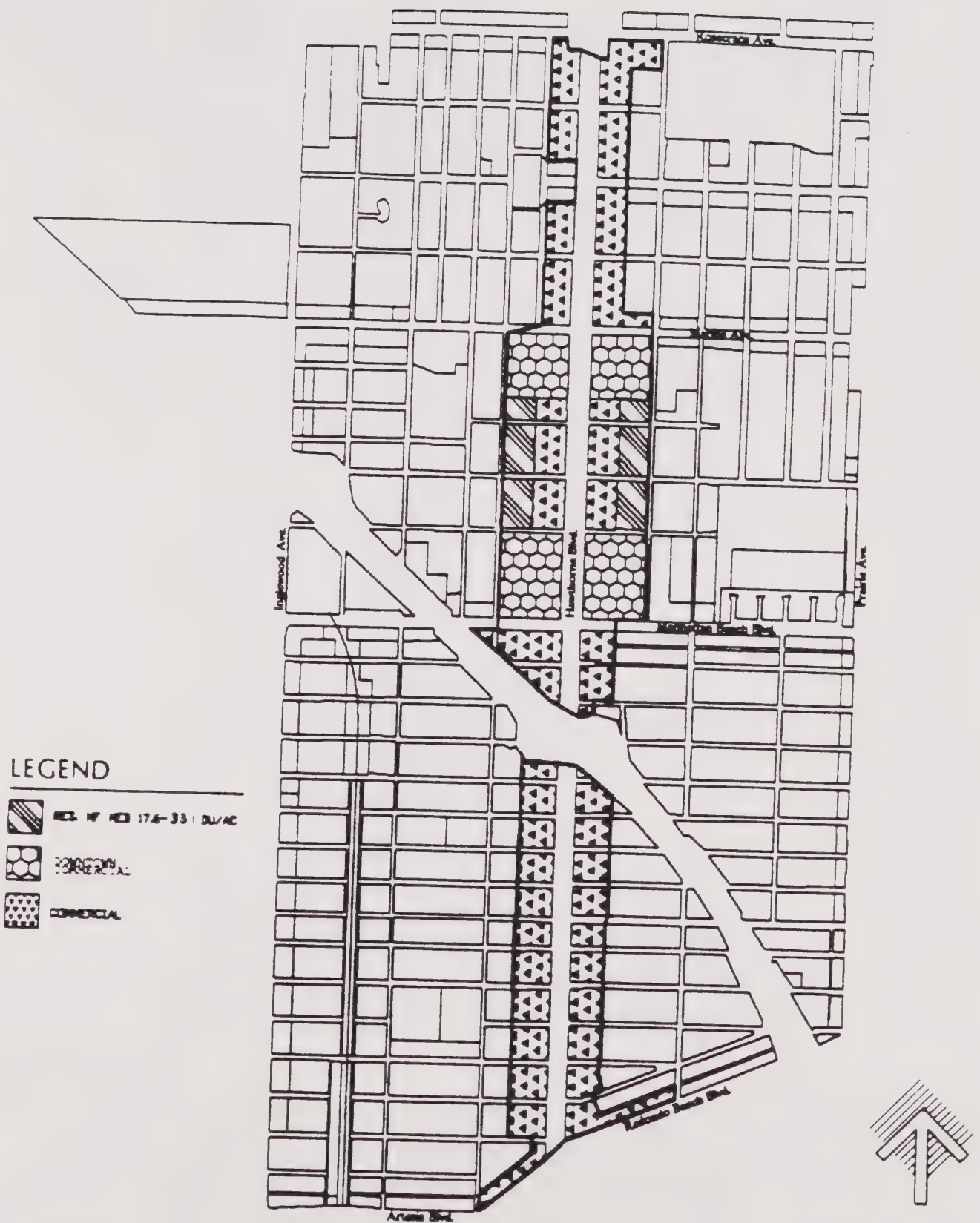
Land Use	Acreage	% of Total
General Commercial	98.4	47.5
Multi-Family Density 17.6-33 du/ac	13.2	6.4
Downtown Commercial	35.0	17.1
Street (not a classification)	<u>60.0</u>	<u>29.0</u>
Total	207.0	100.0

A brief discussion for each land use classification follows.

General Commercial The General Commercial land use classification covers the majority of the corridor overlay area.

In terms of design features, parking lots should be either behind stores or beneath them. Curb-side parking is anticipated to be located along Hawthorne Boulevard, with building locations adjacent or near the right-of-way limits of Hawthorne Boulevard. Pedestrian scale building design elements are desired.

Residential Multi-Family Density The Hawthorne Boulevard Corridor Specific Plan Overlay does not specify precise architectural design styles for structures, but instead requires that the residential aspects of the corridor area portray a cohesive design, compatible with the district concept in which it is located. Since all of the residential classifications are located in the



Specific Plan Land Use Classifications

figure B

Central District, features such as plazas, pedestrian linkages to commercial areas, rear yard and subterranean parking are desired. Including residential classifications of this density in the corridor overlay area is intended to provide for residential units near commercial uses, resulting in reduced vehicle trips and increased access to commercial areas.

Downtown Commercial The Downtown Commercial classification is the key element of the plan which includes commercial areas only. Urban design features include plazas and subterranean and rear yard parking. Structural design of all commercial buildings must be internally consistent.

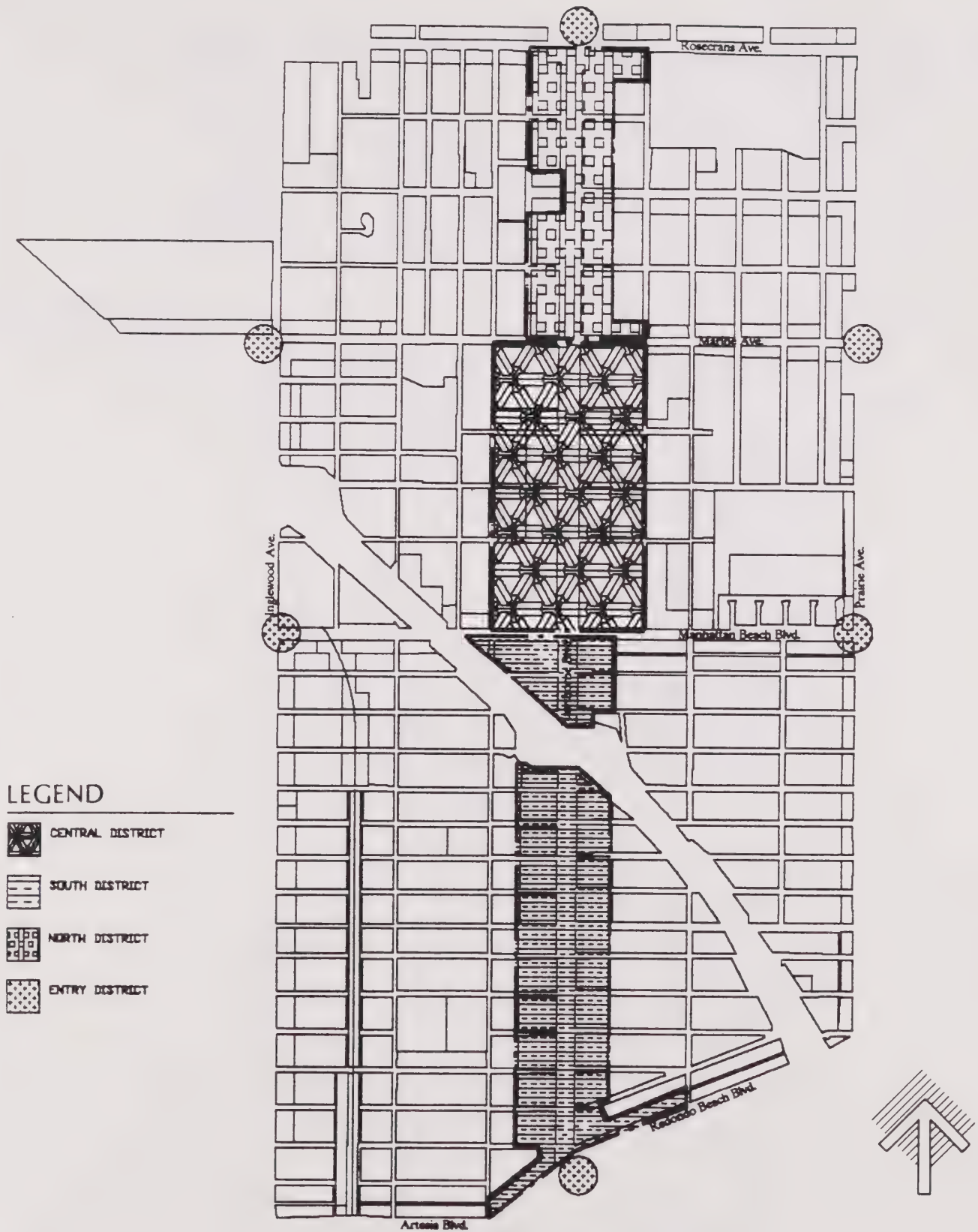
The Downtown Commercial classification is intended to promote uses which will draw people to Lawndale. Commercial uses permitted within this classification include the following:

- Sit-Down Restaurants
- Entertainment Facilities (i.e., comedy night clubs, movie theaters, cultural events centers, etc...)
- Office/Professional Uses
- Hotel/Motels
- Financial Institutions

The overall design of the Downtown Commercial area shall include rear, structural and subterranean parking as well as pedestrian access from adjacent residential uses. Open space and plazas are also required. The entire Downtown Commercial must maintain a cohesive, compatible design.

**Hawthorne Blvd.
Corridor District
Concept**

Recognizing the uniqueness of various locations within the corridor overlay area, the Specific Plan identifies four districts. Although the plan overlay is separated into districts, a unified and comprehensive identity for the aggregate overlay area is desired. Table 2 details the land use distribution of each District and Figure C delineates the location of each District



Specific Plan District Locations

figure C

Table 2

District Land Use Distribution (excluding streets)

<u>District/Land Use Classification</u>	<u>Acreage</u>
North	
General Commercial	29.0
Central	
General Commercial	14.0
Downtown Commercial	35.4
Medium Density 17.6-33.0 du/ac	13.2
South	
General Commercial	55.4
Entryways (not applicable)	

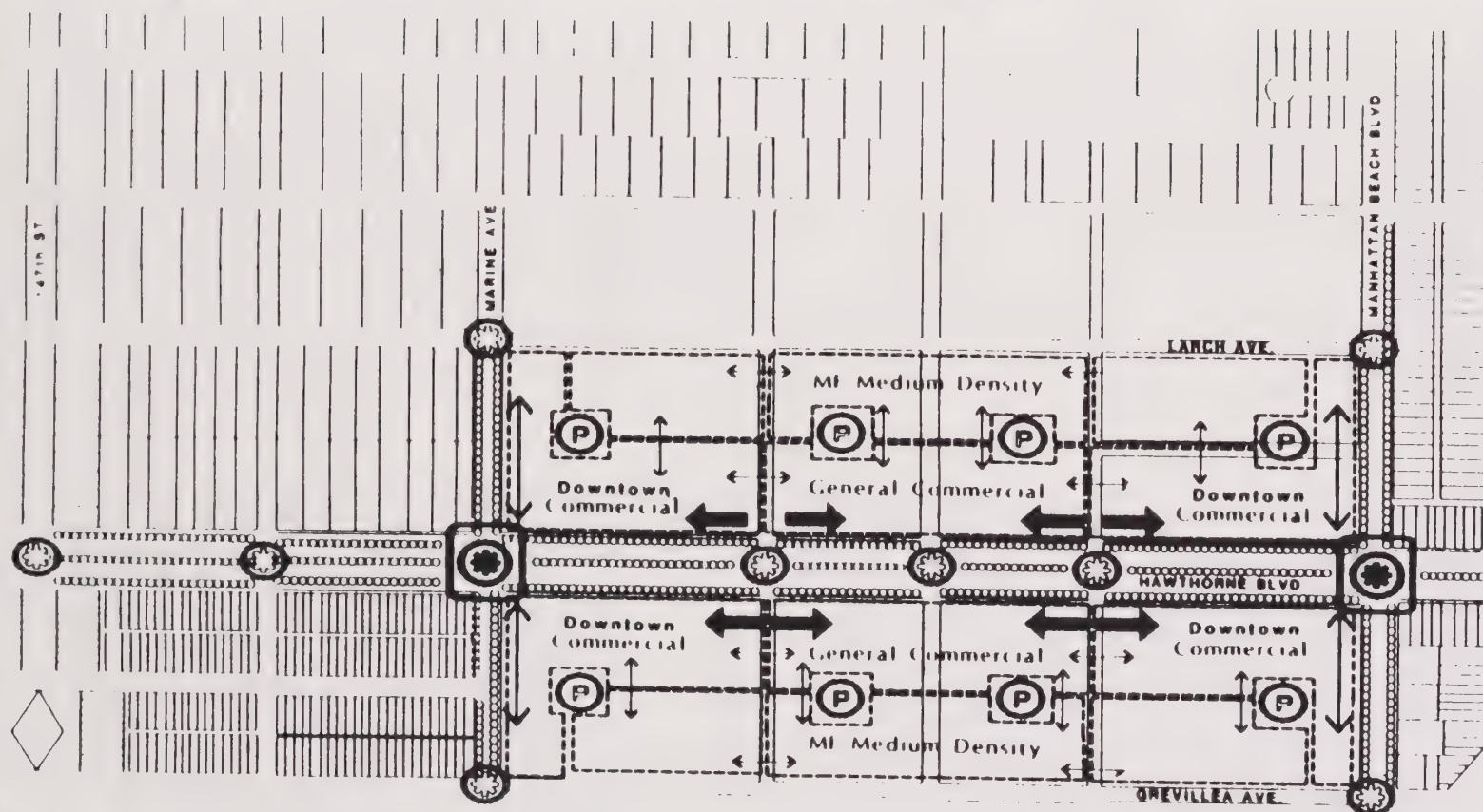
Hawthorne Blvd.

Central District The Central District of the plan area is located between Marine Avenue and Manhattan Beach Boulevard, along Hawthorne Boulevard (see Figure C). The Central District encompasses all of the Downtown Commercial and MF Medium Density 17.6-33.0 du/ac classifications as well as limited General Commercial uses.

The District is in the geographic center of the City. As Lawndale developed, the Hawthorne Boulevard Corridor progressed parcel by parcel, resulting in a mixture of land uses lacking distinctive design features and unified landscape themes. By its central location, the District became indicative of the lack of business and consumer appeal generally found along Hawthorne Boulevard.

The City of Lawndale lacks a focal point. The Central District will provide a focal point with a cohesive interaction of housing and commercial uses with a separation of pedestrian and vehicular traffic. The Plan's intent is that this district will become the City's central focal point, providing this desired interaction. Persons entering from any access point should be aware that this is the Central District of Lawndale. An activity center with uses that are compatible and synergistic is desired.

Establishing a sense of place through the use of uniform streetscape features, parking areas, landscaping, street furniture, hardscape treatments and signage is an effective way to create a Central District for Lawndale.



LEGEND

- district gateway ¹
- enhanced intersections ¹
- aggregate off-street parking areas
- urban forestation/streetscape enhancement ²
- pedestrian retail arcade linkages
- pedestrian linkage
- land use description

¹ NOTE REFER TO APPENDIX FOR DETAILS OF MAJOR STREET IMPROVEMENTS

² NOTE REFER TO LANDSCAPE ELEMENT FOR LANDSCAPE IMPROVEMENTS



Central District Land Use Concept

Figure D

**Hawthorne Blvd.
North District**

The North District is entirely one of General Commercial uses. It is located north of Marine Avenue along Hawthorne Boulevard. This district is intended to be improved and developed to provide a gateway into the Central District from the north. The District concept is illustrated in Figure E. All urban design elements are to reinforce the Central District's theme as well as to create a consistent contextual pattern along Hawthorne Boulevard. Street improvement, parking areas and building scale are specifically intended to facilitate this.

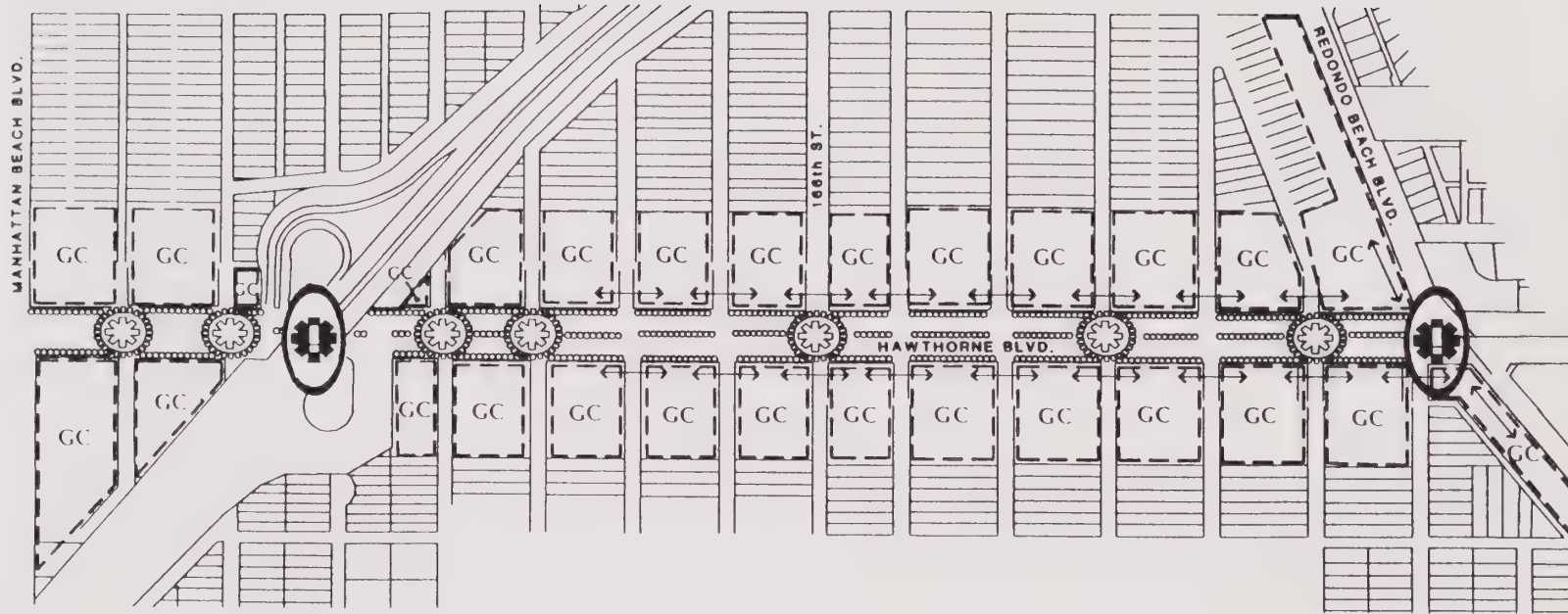
**Hawthorne Blvd.
South District**

The South District is located along Hawthorne Boulevard, south of Manhattan Beach Boulevard to Artesia Boulevard. This district is entirely General Commercial. Similar to the North District, the South District Concept (Figure F) is intended to strengthen and enhance the community's image by creating consistent design features in relation to Hawthorne Boulevard. Street improvements in the South District are somewhat different than the north due to CALTRANS proposed light rail line and the more narrow right-of-way width (170 feet).






The light-rail transit facility is tentatively proposed to locate in the median area of Hawthorne Boulevard with a stop at 166th Street. Beyond consistent intersection, landscaping, signage, and building placement, the South District has its most pronounced opportunities to define itself with activities and uses tied to the light-rail system. Special service commercial uses, associated with commuters waiting or leaving the rail stop area, is an example of this. At the proposed stop, parking facilities for autos and bicycles, along with pedestrian plazas is desired. Overall design themes for the stop should be consistent with the Central District, thereby maintaining the cohesiveness of the entire corridor.

Entry District

Unlike the previous districts which are on Hawthorne Boulevard, the Entry District is made up of key intersections in the City. Specifically, it encompasses the following entry points to Lawndale 1) Hawthorne Boulevard and Artesia Boulevard, 2) Hawthorne Boulevard and Rosecrans Avenue, 3) Marine Avenue and Inglewood Avenue, 4) Marine Avenue and Prairie Avenue, 5) Manhattan Beach Boulevard and Inglewood Avenue, 6) Manhattan Beach Boulevard and Prairie Avenue and 7) 405 Freeway off-ramp and Manhattan Beach Boulevard. This District does not directly relate to land use classifications. Instead, this district proposes to create monumentation, lighting, landscaping and hardscape treatments, welcoming people to Lawndale. By doing this, there will be a greater feeling of arrival, and with this, the City's identity and image are enhanced. The concepts for the entry points are illustrated in Figure G.



LEGEND

-  civic gateway ¹
-  enhanced intersection ¹
-  urban forestation/streetscape enhancement ²
-  pedestrian linkage
-  land use designator: General Commercial

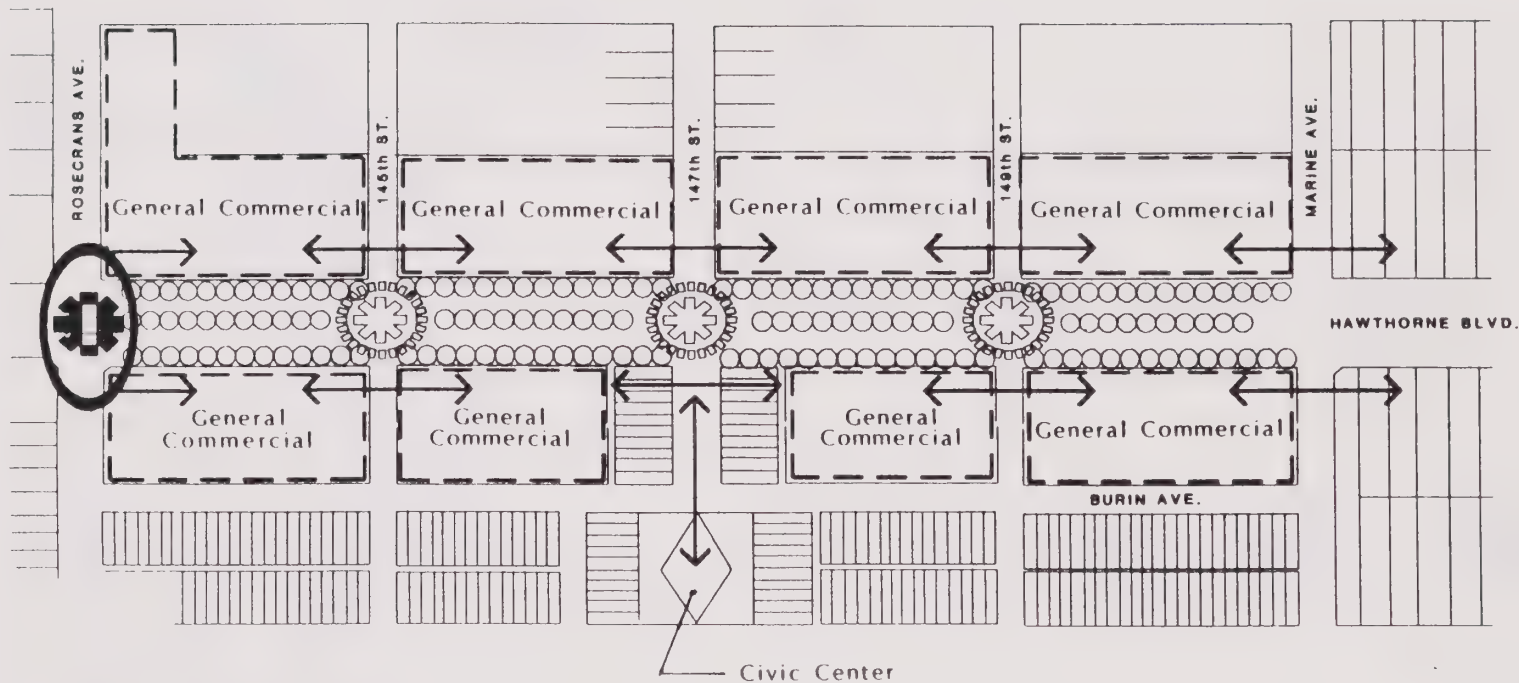
¹ NOTE: REFER TO APPENDIX FOR DETAILS OF MAJOR STREET IMPROVEMENTS

² NOTE: REFER TO LANDSCAPE CONCEPT FOR LANDSCAPE IMPROVEMENTS








South District
Land Use Concept

figure F



LEGEND

-  civic gateway ¹
-  enhanced intersection ¹
-  urban forestation/streetscape enhancement ²
-  pedestrian linkage
-  land use designator

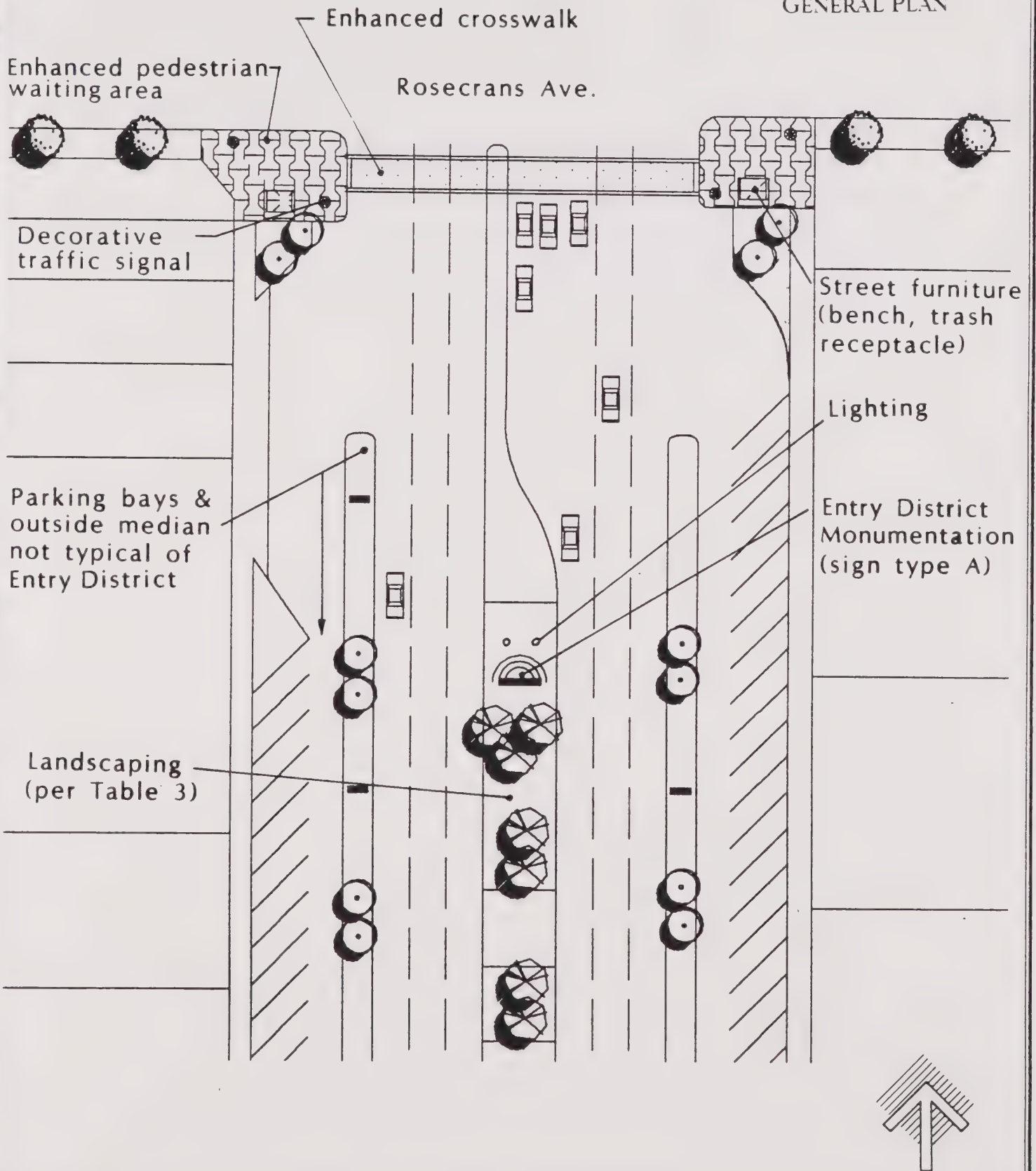
¹ NOTE: REFER TO APPENDIX FOR DETAILS OF MAJOR STREET IMPROVEMENTS

² NOTE: REFER TO LANDSCAPE CONCEPT FOR LANDSCAPE IMPROVEMENTS



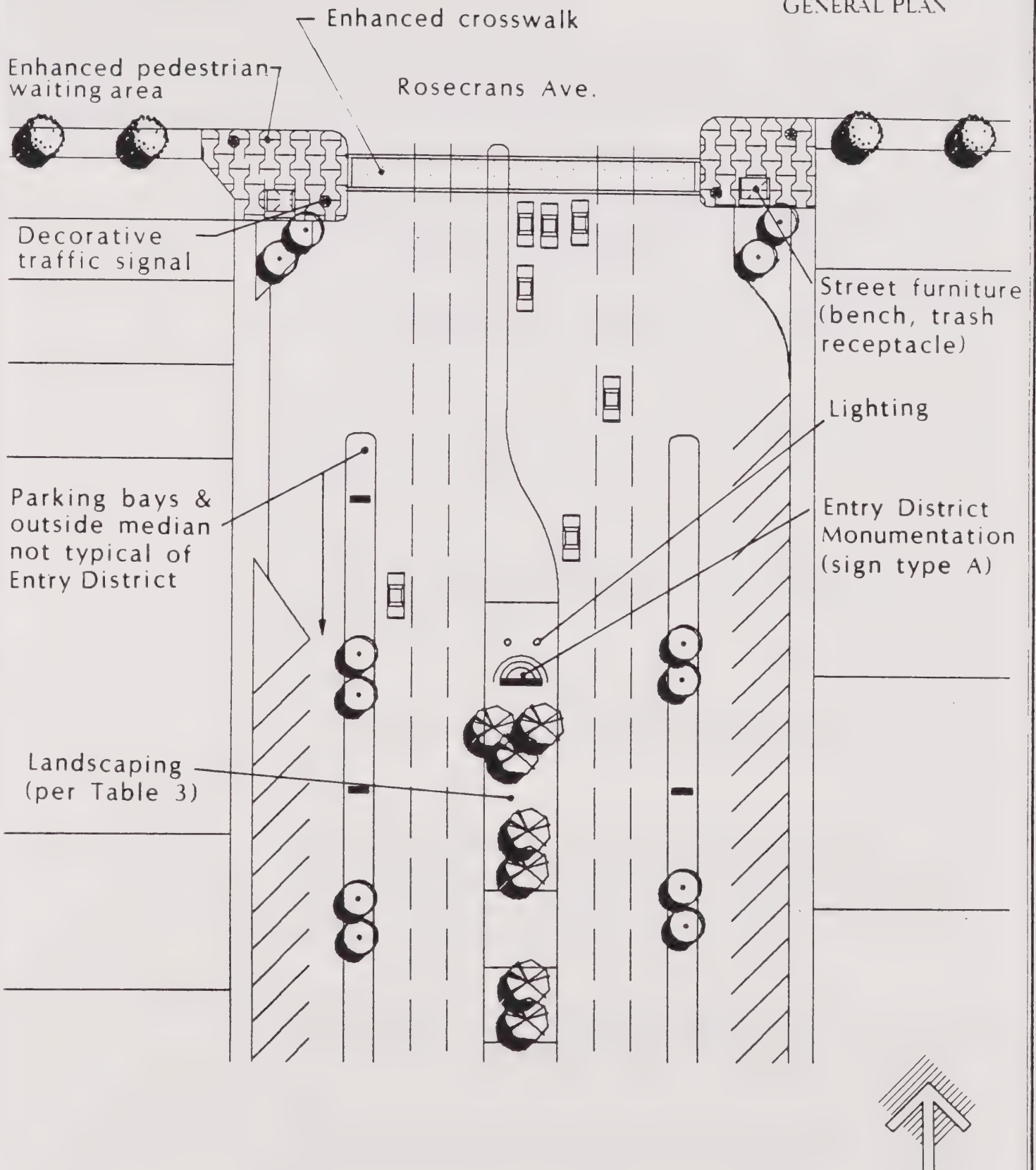
North District Land Use Concept

figure E



Entry District Concept

figure G



Entry District Concept

figure G

Goals and Policies

Goal 1 Hawthorne Blvd. Corridor Specific Plan Overlay

It is the City of Lawndale's goal to improve the physical, aesthetic, economic and social characteristics of the Hawthorne Boulevard Corridor Specific Plan Overlay area.

Policy 1a

To the degree that it is economically feasible and consistent with sound transportation engineering practices, the City shall systematically improve the Hawthorne Boulevard right-of-way. Improvements to include re-locating the median strip and parking bays to the outside portions of Hawthorne Boulevard, near shops and retail areas.

Policy 1b

The City shall develop and adopt a uniform lighting and landscaping program for Hawthorne Boulevard, based on the Urban Design Guidelines in this Specific Plan Overlay.

Policy 1c

The City shall promote the development of a uniform signage program for Hawthorne Boulevard, based on the Urban Design Guidelines in this Specific Plan Overlay.

Policy 1d

The City shall use available funds to establish a preferential loan program for upgrading existing structures and facades, within the Overlay area.

Policy 1e

The City shall improve the City-wide access points and major intersections with uniform monumentation, lighting, hardscape and landscaping treatments, consistent with the Urban Design Guidelines and Entry District concept in this Specific Plan.

Policy 1f

New development proposed in the corridor area shall incorporate uniform urban design themes, as suggested in this Specific Plan.

Policy 1g

In the Central District, the City shall give incentives for lot consolidation and joint public/private ventures to promote cohesive and comprehensive planning and development efforts.

Policy 1h

The City shall promote the development of a Comprehensive Financing program to fund improvements and maintenance of the corridor area.

Policy 1i

New developments, rehabilitation and changes in use shall conform to the Hawthorne Boulevard Corridor Specific Plan Overlay.

Policy 1j

The City shall improve its code enforcement efforts within the plan area to ensure the maintenance, general appearance and safety of the area.

Policy 1k

In order to minimize visual impacts of parking areas, and to better define the "public space" of the roadway, the City shall discourage large parking lots in front of structures and encourage the placement of parking areas behind or beneath structures or permit well screened parking structures, which can be utilized by a variety of commercial uses. Parking requirements, when proposed to be aggregated with other uses, shall clearly demonstrate that adequate parking is provided.

Policy 1l

All site development plans within the corridor area shall incorporate, where feasible, pedestrian access from adjacent areas and pedestrian activity centers such as plazas, courtyards or seating areas. All site development plans shall also include the provision of adequate service and delivery access.

Policy 1m

In the Downtown Commercial nodes, the City shall pursue and promote cohesive and comprehensive development in which sit-down restaurants are a high priority use.

Policy 1n

In areas where a light-rail transit facility may be proposed, the City shall encourage development of adequate automobile and bicycle parking

Policy 1o

The City shall investigate the feasibility of transferring from the State of California to the City, Hawthorne Boulevard, south of the 405 Freeway.

Policy 1p

The City shall require detailed infrastructure studies within the plan area prior to permitting development to commence to ensure adequate availability of water, sewage disposal, drainage, energy and other essential facilities the City may find are necessary to support the intended use.

Policy 1q

The City shall develop and implement a program for the undergrounding of utility lines within the plan area.

Policy 1r

Structures with mixed commercial and office uses shall be required to reserve the lower floor for predominately retail commercial uses.

Policy 1s

Commercial Floor Area Ratios shall be permitted up to 3.5 in the Downtown Commercial up to 3.0 in the General Commercial classifications fronting on Hawthorne Boulevard.

Implementation Programs

1. Hawthorne Blvd. Corridor Specific Plan Overlay

1.1. Financing Program

The City shall adopt a detailed financing program for public improvements, rehabilitation and maintenance of the plan area. The program shall be administered by the Community Development Department and may include one or more of the following financing techniques:

- Special Benefit Taxing Area (Mello-Roos)
- Low Interest Loans
- Development Fees
- Tax Increment Financing
- Development Agreement Fees
- Sale of Bonds
- Business Licensing Tax
- Maintenance District Fees
- State or Federal Funds
- Public Parking Fees

The financing program shall be adopted prior to implementation of the Hawthorne Boulevard Corridor Specific Plan.

1.2. Public Awareness Program

The City shall institute a Public Awareness Program to alert the local citizenry of the improvements slated for the commercial center of Lawndale. The program will encourage local residents to "shop Lawndale" and to motivate owners to rehabilitate deteriorating structures and to comply with the design elements of the plan.

1.3. Zoning Ordinance Revisions

The Zoning Ordinance shall be revised to include provisions for the following within the Hawthorne Boulevard Corridor Specific Plan Overlay:

- Increased floor area ratios as incentives to meet the Urban Design Guidelines of the plan (3.5 in the Downtown Commercial and 3.0 in other commercial areas of the plan)
- Reduced front yard setbacks, to locate structures closer to the right-of-way
- Permit rear yard, subterranean and structural parking areas that may be jointly utilized by various users
- Require off-sets to buildings above the desired street space ratios (Figure P)
- Require consistency with the Urban Design Guidelines presented in this Specific Plan
- Permit Variances to height restrictions to allow buildings to meet the street space ratio defined in the Design Guidelines of the plan.
- Require adequate buffers between commercial and residential uses utilizing well screened parking areas, landscaping, plazas, and other means determined appropriate by the City. Concrete walls and other non-accessible buffers should be discouraged.

1.4. Hawthorne Boulevard Street Improvement Cooperation

The City shall continue its program of cooperation with Caltrans and adjacent cities. Further cooperation to include right-of-way improvements to Hawthorne Boulevard and pursuit of transferring rights of Hawthorne Boulevard, south of the 405 Freeway, to the City of Lawndale.



1.5. Developer Incentive Program

The City shall allow permit fast tracking for developments determined "consistent" with the Design Guidelines, Goals and Policies, and intent of this Specific Plan. Determination to be made by the director of Community Development. FAR bonus to be permitted, consistent with this plan, when developments incorporate design elements of this plan (i.e., subterranean parking, plazas, etc.).

1.6. Urban Design Guidelines

The City shall adopt the Urban Design Guidelines presented in the Specific Plan. The Guidelines shall be used to determine "consistency" of new projects, rehabilitated structures, and change of uses. Consistency determination to include signage, building placement, scale, right-of-way improvements, landscaping, and lighting.

1.7. Phasing Program

Based on available Funding, the City shall phase improvements of the Hawthorne Boulevard Corridor Specific Plan as follows:

- Entry District (end of 1993)
- Central District (1992-1994)
- North District (1992-1995)
- South District (1993-1997)

Should circumstances warrant, the phasing of the plan may change.

1.8. Main Street Program

The City shall make application to the state for selection of Hawthorne Boulevard to achieve Main Street Program status and benefits.

Urban Design Guidelines**Overall Concept**

It is the intent of the Hawthorne Boulevard Corridor Specific Plan Overlay to create a desirable, integrated sense of place within the City of Lawndale.

The Hawthorne Boulevard Corridor provides Lawndale with its greatest opportunity for image and identity enhancement as well as economic success. The overall urban design concept, therefore, is predicated on the improvement of this corridor based on its importance to Lawndale. In this respect, the design program incorporates uniform signage, lighting, landscaping, street treatments, monumentation and a proper mixture of residential and commercial uses.

The Urban Design Guidelines for the Hawthorne Boulevard Corridor Specific Plan Overlay are presented here. Illustrations are used both within the sections and in the appendix of this plan to show the desired concept for implementation.

Street Improvements

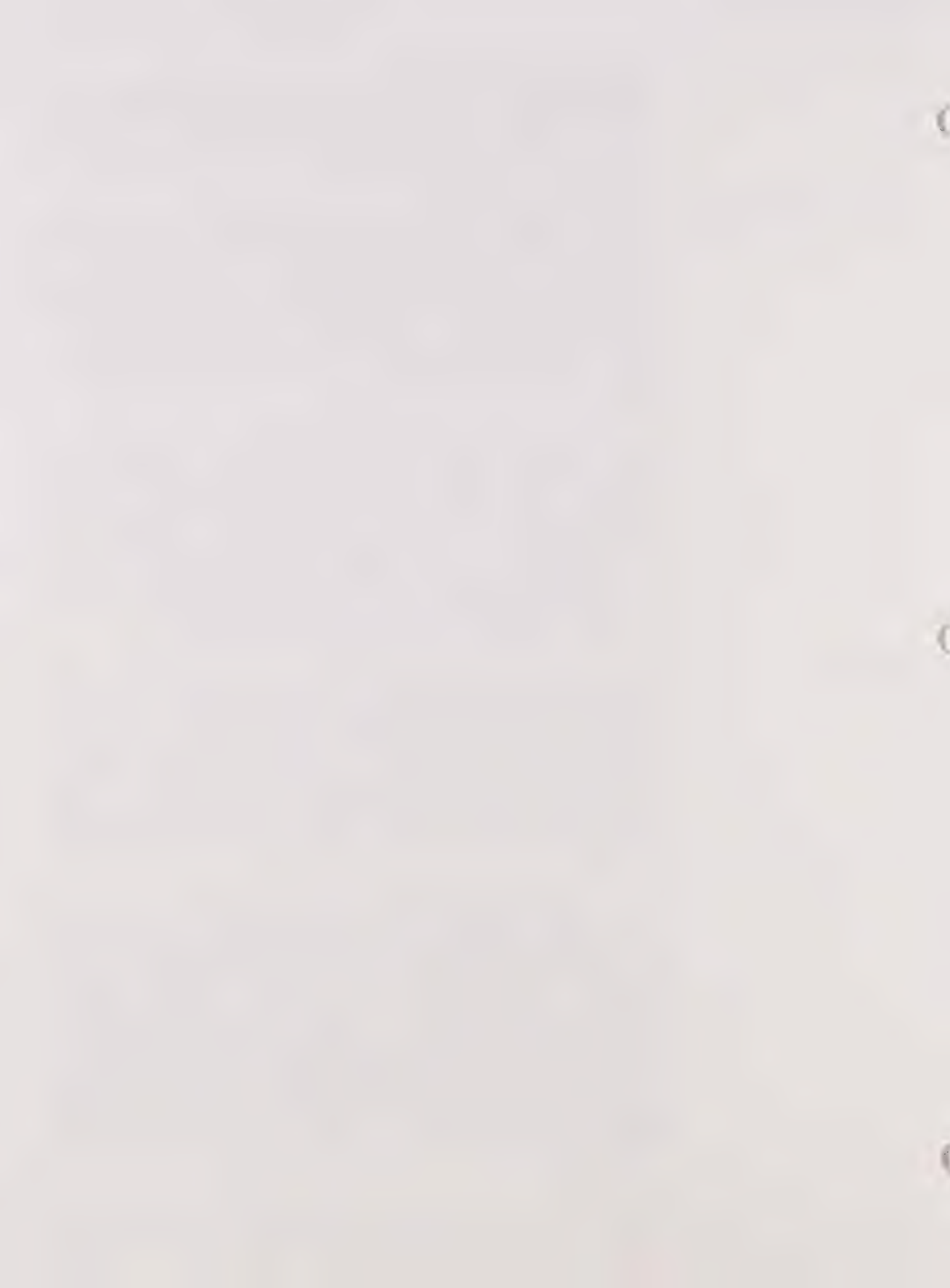
Hawthorne Boulevard is a major arterial, designed to accommodate over 50,000 daily trips. As such, it is the main travel route for many residents of Lawndale and neighboring cities. One's perception of Lawndale can be formed based on the single aspect of driving through the City. In this regard, it is the intent of the Hawthorne Boulevard Corridor Specific Plan to improve the perception of the City through Urban Design improvements to the Hawthorne Boulevard right-of-way.

Improvements to Hawthorne Boulevard include the reduction of the median strip and the relocation of the parking areas to the outside of the right-of-way. Curbside parking is further separated from the through lanes by another median, acting as a buffer. Transit stops and improvements shown in the landscaping section of this plan are also elements of the right-of-way improvements. The appendices of this plan illustrate the improvements for Hawthorne Boulevard. Also in the appendices are details of intersection improvements

Signage

Signs in the Hawthorne Boulevard Corridor Specific Plan Overlay should advertise a place of business or provide directions and information and shall be architecturally attractive and contribute to the overall design character of the plan area. Unless signs are regulated, they will tend to compete with each other and with the cohesiveness of the plan area. Without reasonably applied design criteria, signs will detract and dominate the setting via height, shape, size, number, lighting and movement.

A "sign" shall mean any device, display or structure other than buildings or landscaping, readily visible from public property and used primarily for visual communication for the purpose of, or having the result of, bringing the subject thereof to the attention of the person, group of persons, or the public generally. A sign includes, but is not limited to, any and all reading matter, letters, numerals, pictorial representations, emblems, trademarks, flags, banners, streamers, pennants, inscriptions, and patterns whether affixed to a building, painted or otherwise depicted on a building, or separate from any building, and shall include window signs.



For the purpose of delineation, two types of signs are utilized in these Urban Design Guidelines:

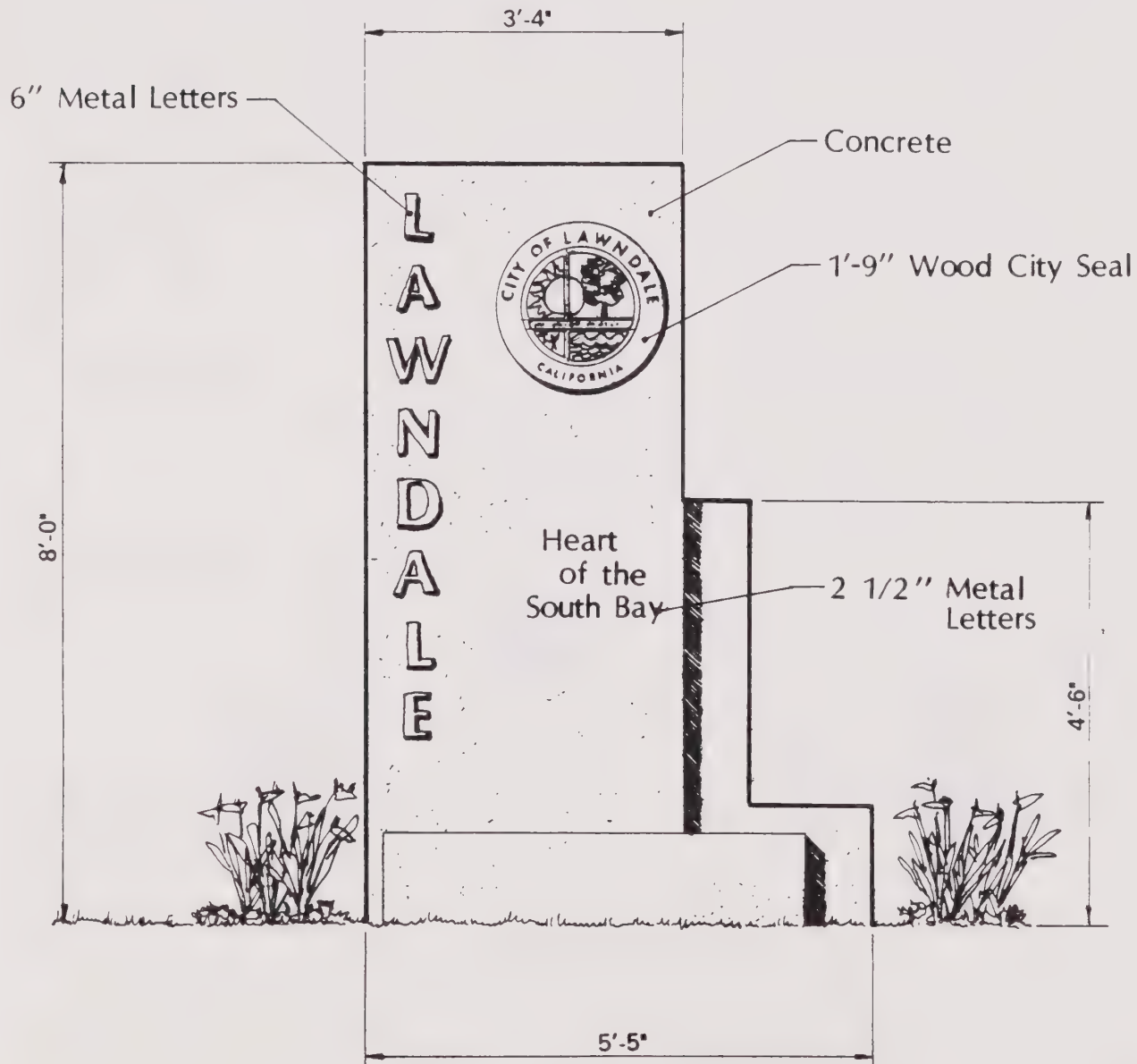
Public Signs

Signage located within the right-of-way for purposes of displaying street names, district entry, and City monumentation. There are four types of public signs presented in these Urban Design Guidelines, as illustrated in Figures H through K and further defined by location in Figures L through O. Public signs shall be consistent with the illustrations and locations presented in the referenced Figures. Public signs also include vehicular traffic and directional signage. The design elements of these types of signs shall compliment the overall urban design features presented in these Urban Design Guidelines.

Private Signs

Signage that designates the name of the owner or occupant of the premise upon which such signs are placed, or identifies such premises; or describes or defines goods offered, manufactured or produced, or services rendered on the premises. Mural art is not considered signage for purposes of this specific plan. This type of art work shall be located in the plan areas where the City Council determines it appropriate. Private signage shall be consistent with the following regulations:

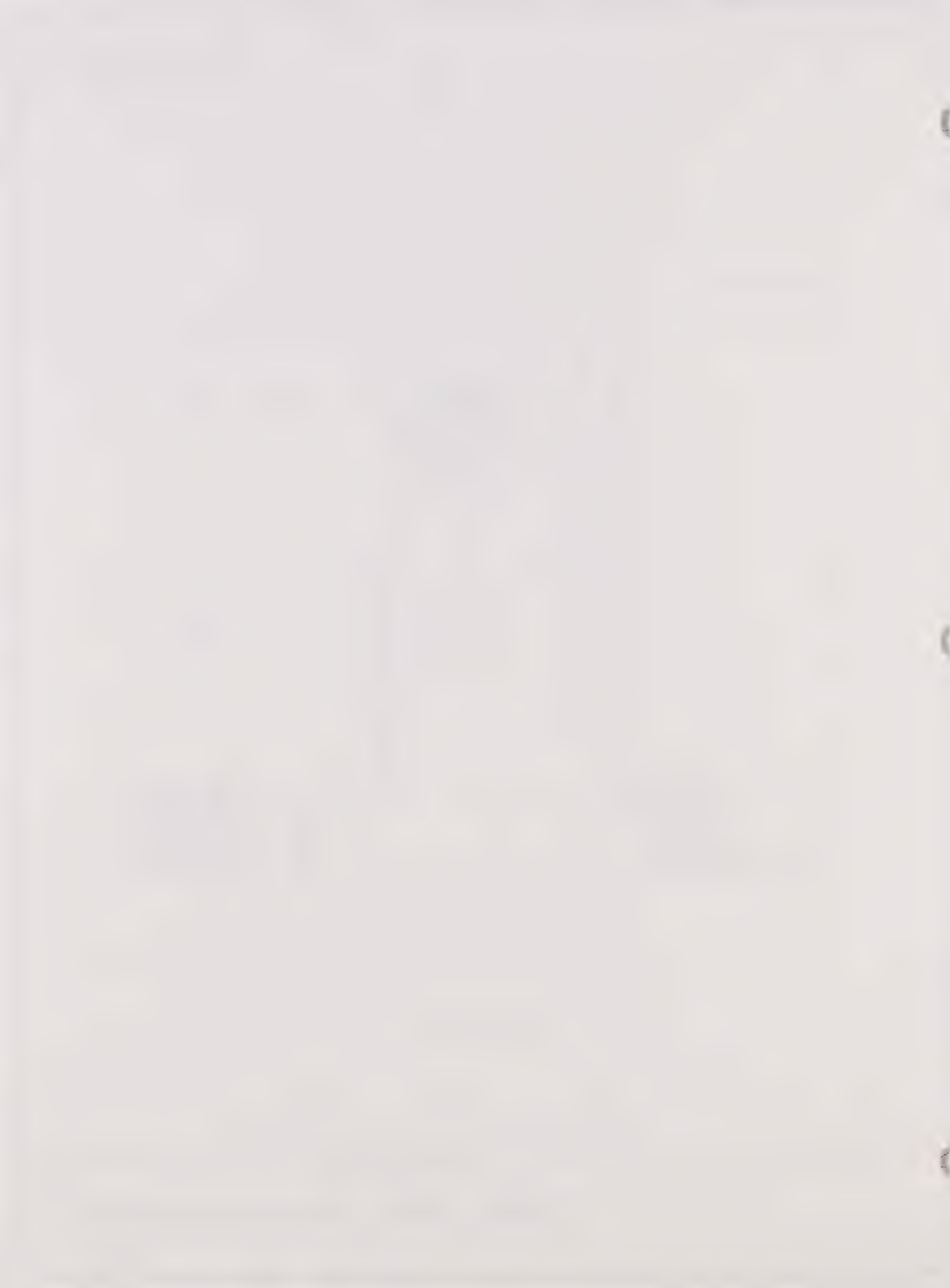
- a. Signs should be pedestrian oriented in size and shape. Lettering and symbols shall be simple and bold.
- b. For buildings or portions thereof under separate management or control having building frontages of fifty (50) feet or less: The aggregate surface area of all exterior wall signs on the premises shall not exceed two square feet per lineal foot of total building frontage or one hundred (100) square feet, whichever is less, for each frontage on a public street or each frontage with public access; provided, however, that the surface area of all such signs shall not exceed, in the aggregate, one hundred (100) square feet on any single building frontage.
- c. For buildings or portions thereof under separate management or control having building frontages in excess of fifty (50) feet: The aggregate surface area of all exterior wall signs on the premises shall not exceed 1.5 square feet per lineal foot of total building frontage or one hundred fifty (150) square feet, whichever is less, provided, however, that the surface area of all such signs shall not exceed, in the aggregate, one hundred fifty (150) square feet on any single building frontage.

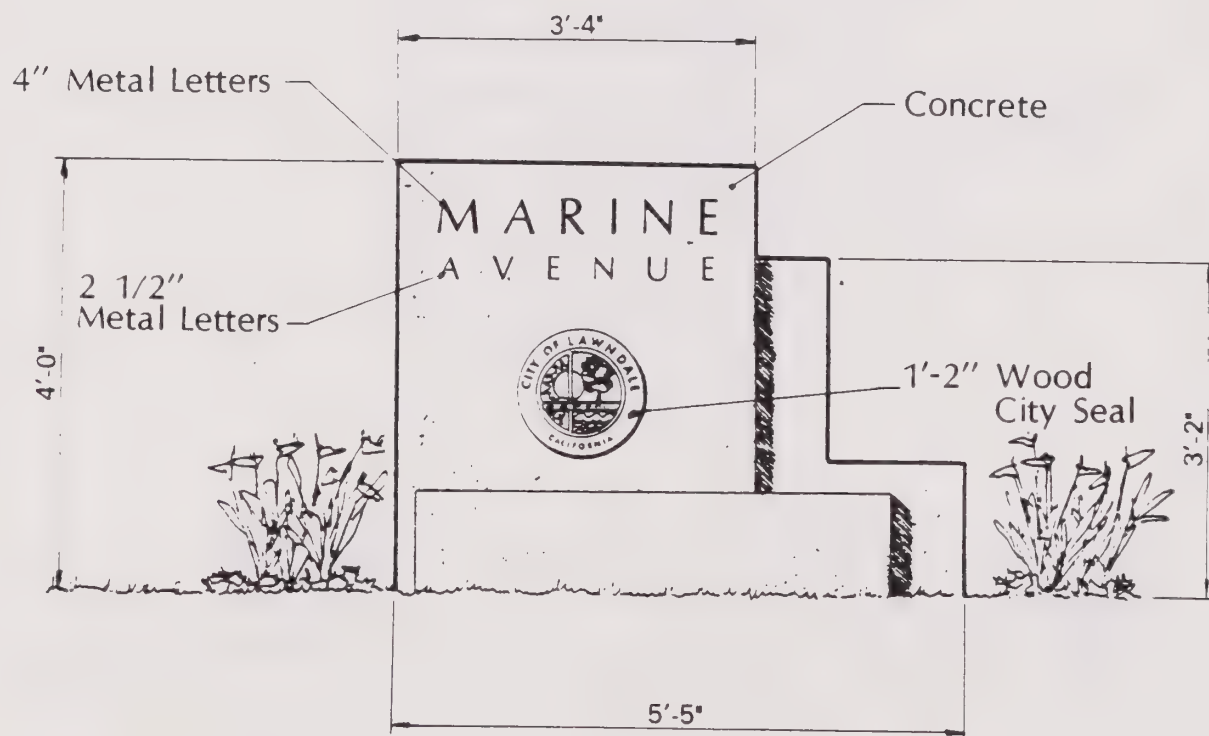


SIGN TYPE A

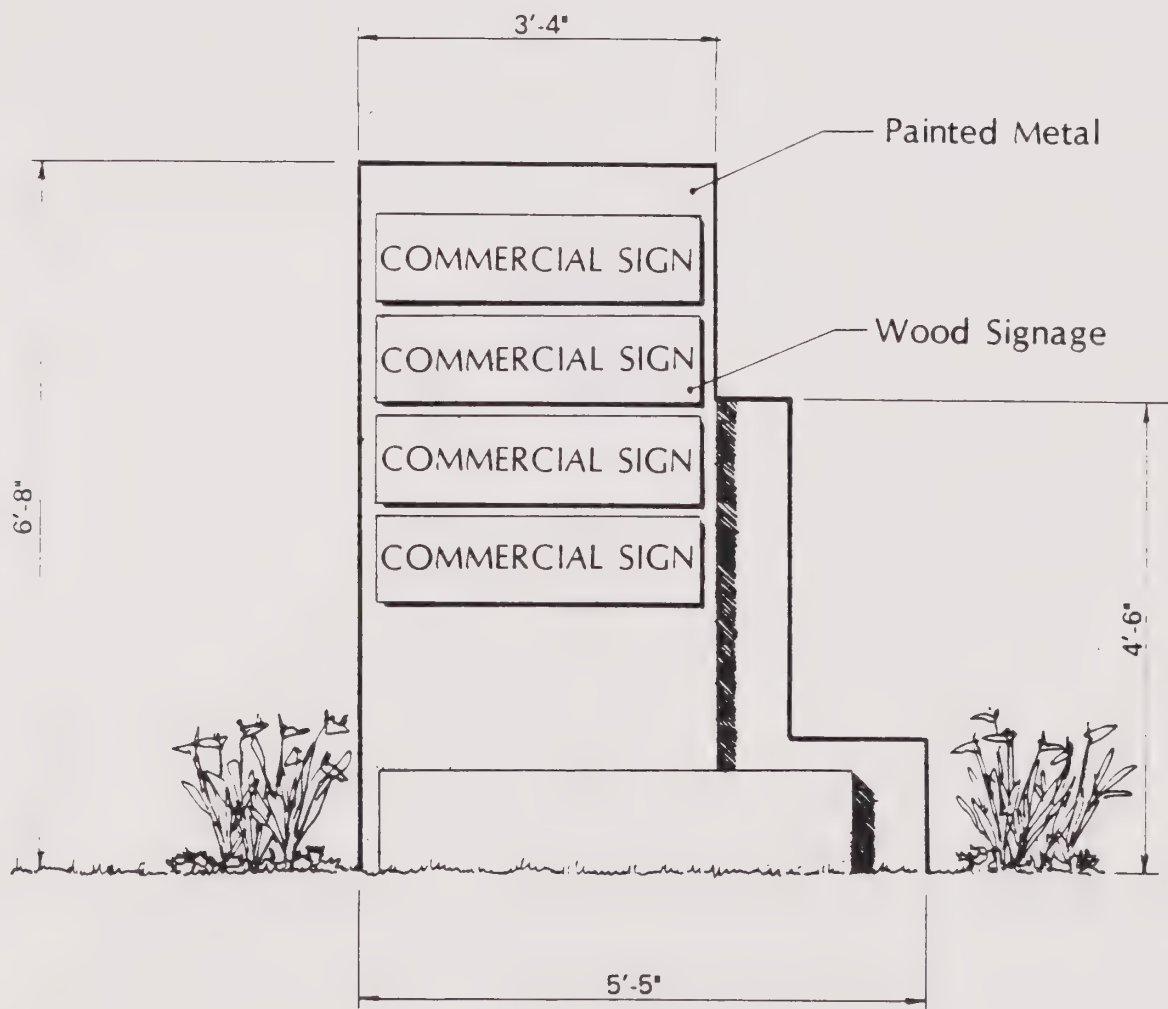
Entry Way Monumentation

figure H





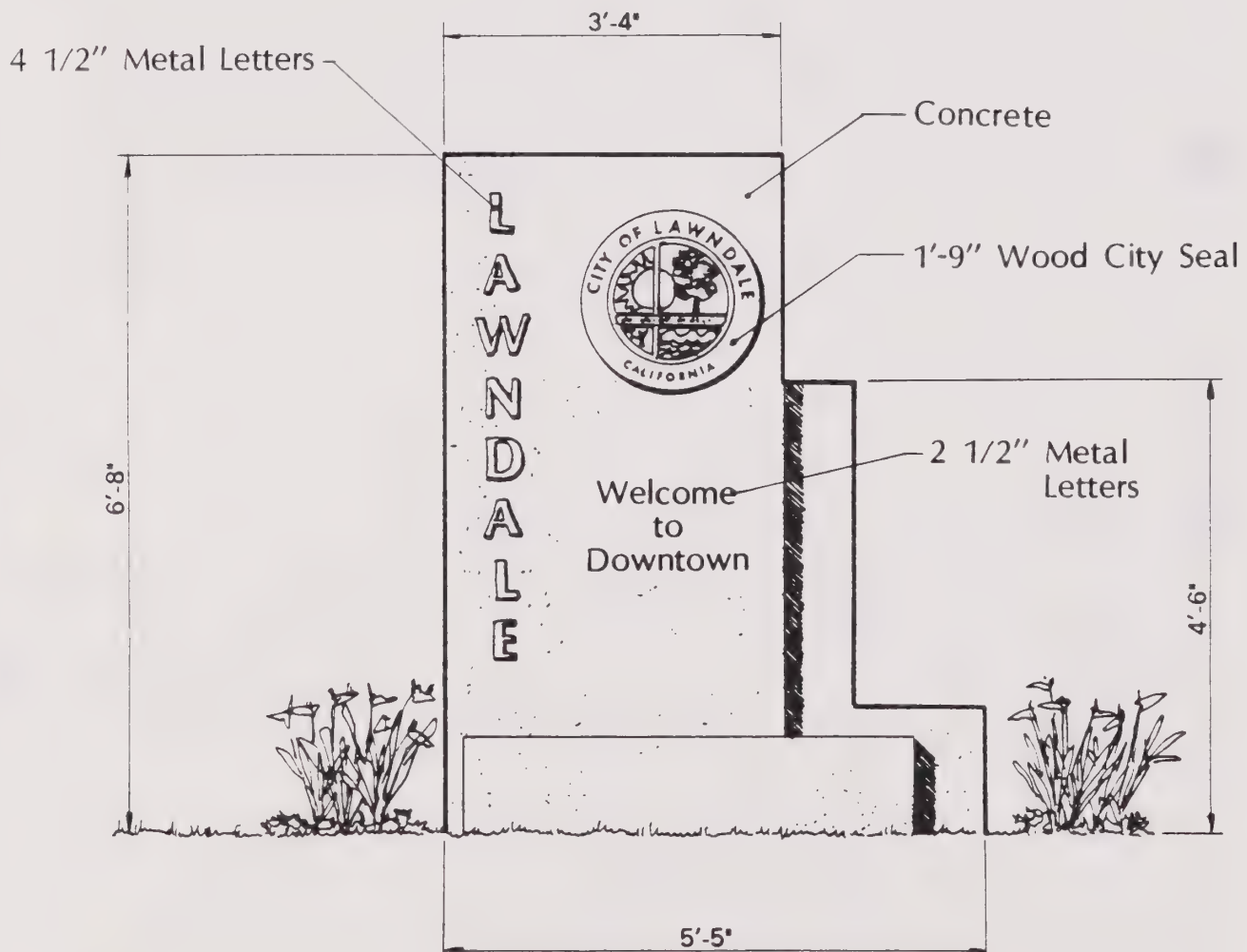
SIGN TYPE B



SIGN TYPE C

Commercial Roadway Signage

figure J




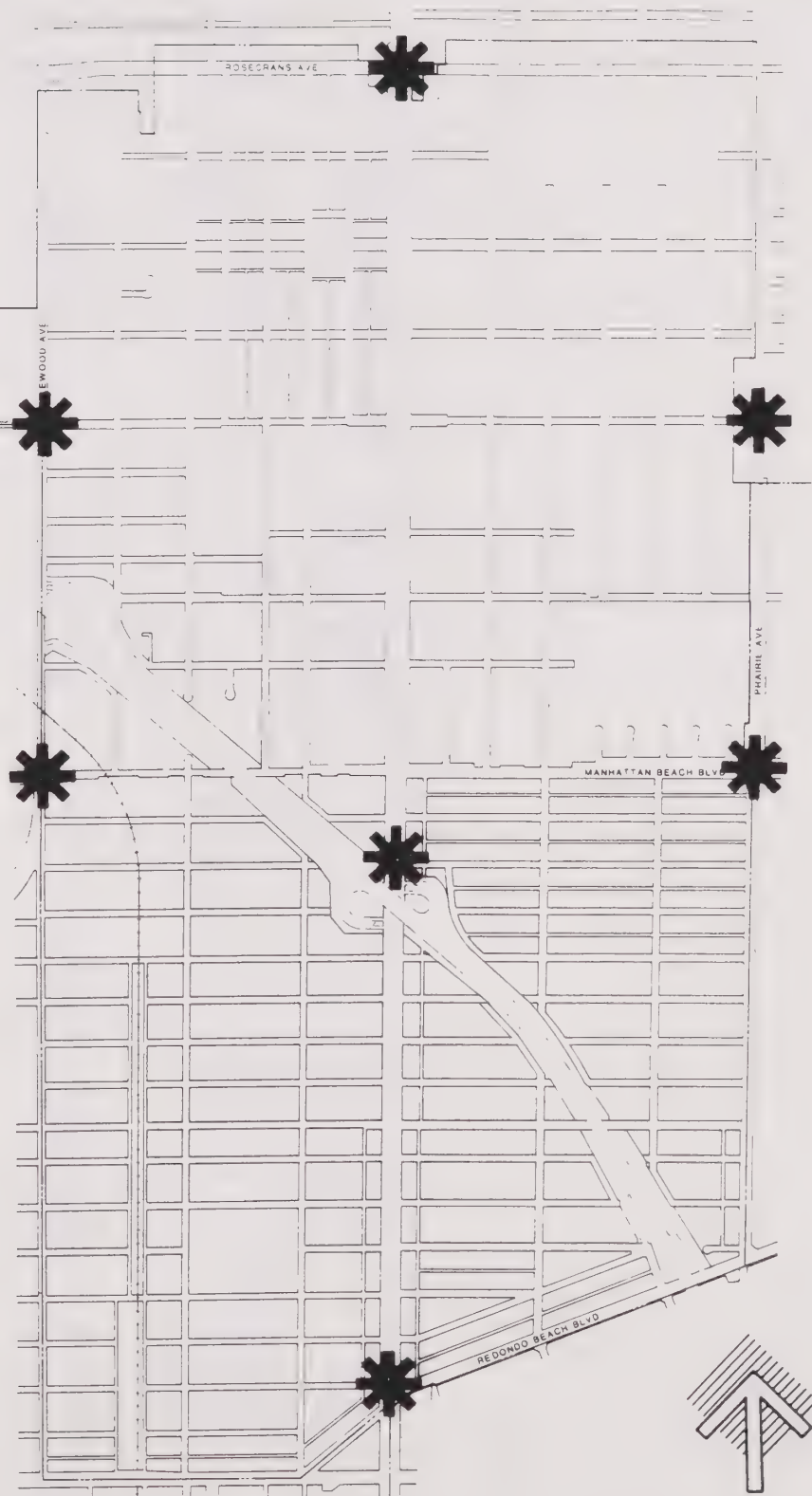
SIGN TYPE D ,

Central District Monumentation

figure K

LEGEND

 Civic entry
monument locations



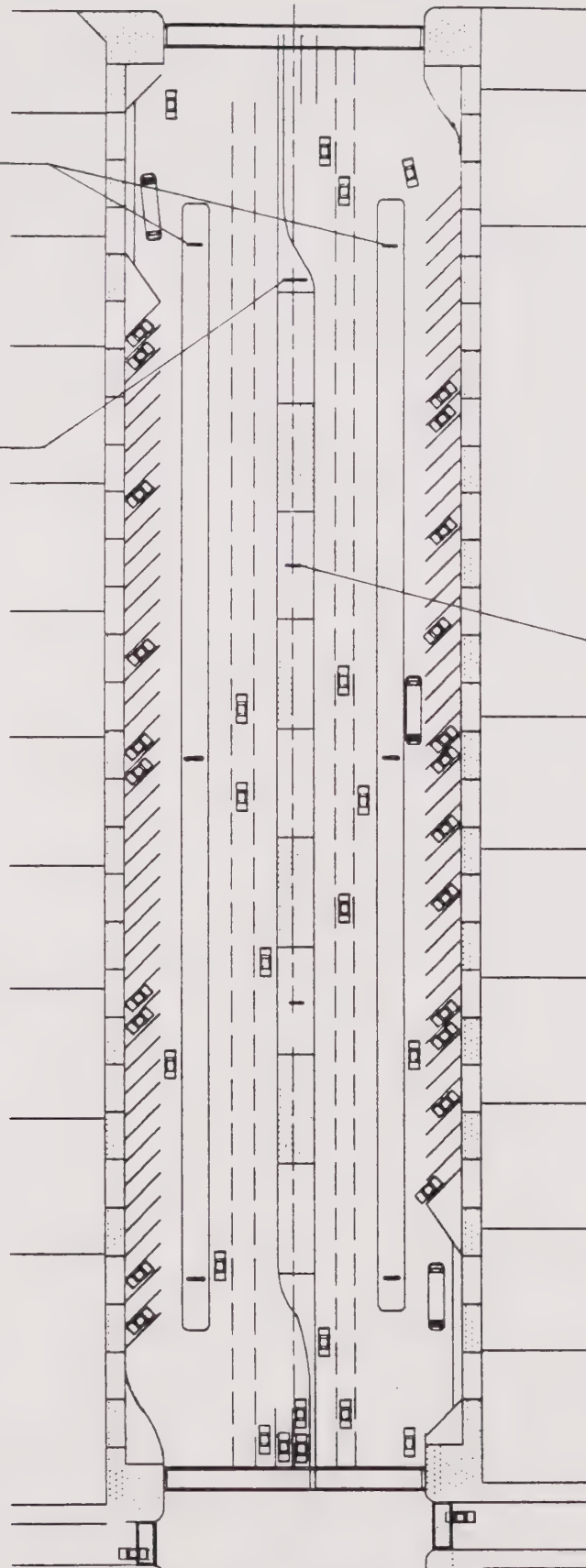
Civic Entry Monument Locations

figure L

Type C sign
Commercial
roadway signage
Typical for
outside median

Type D sign
Central District
monumentation

Type B sign
Street signage
Typical for
central median

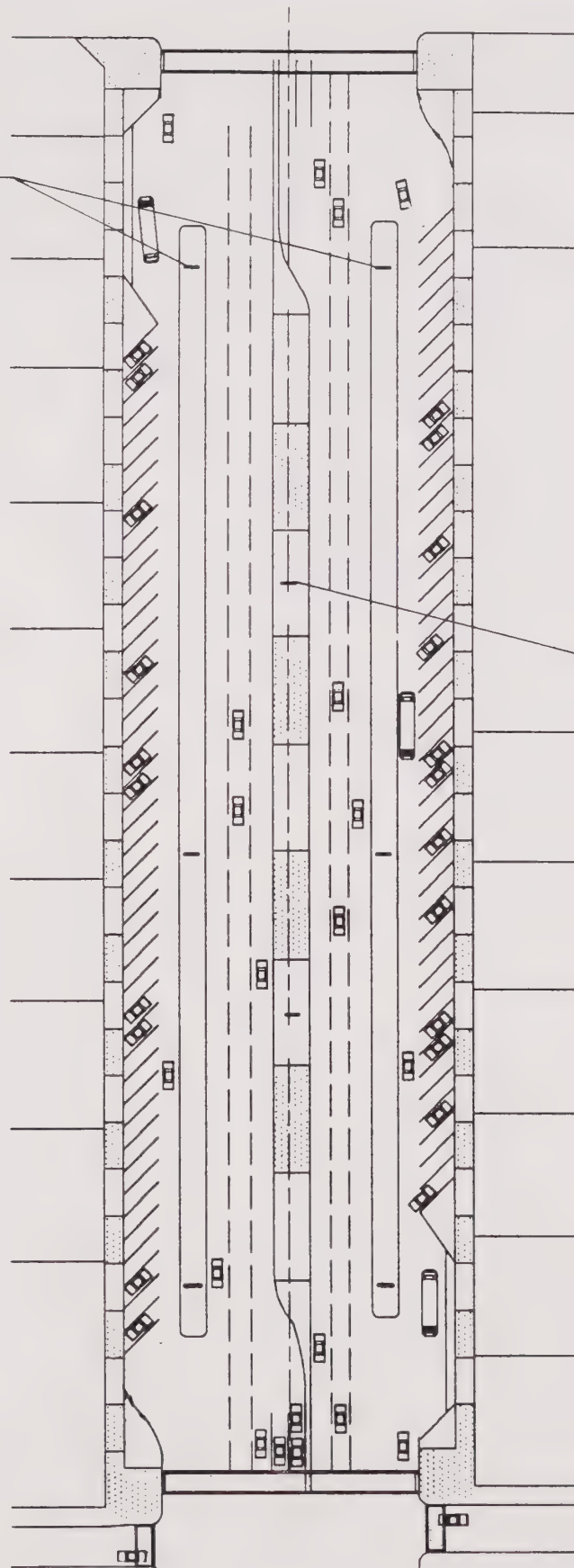


Central District Signage Locations

figure M

Type C sign
Commercial
roadway signage
Typical for
outside median

Type B sign
Street signage
Typical for
central median

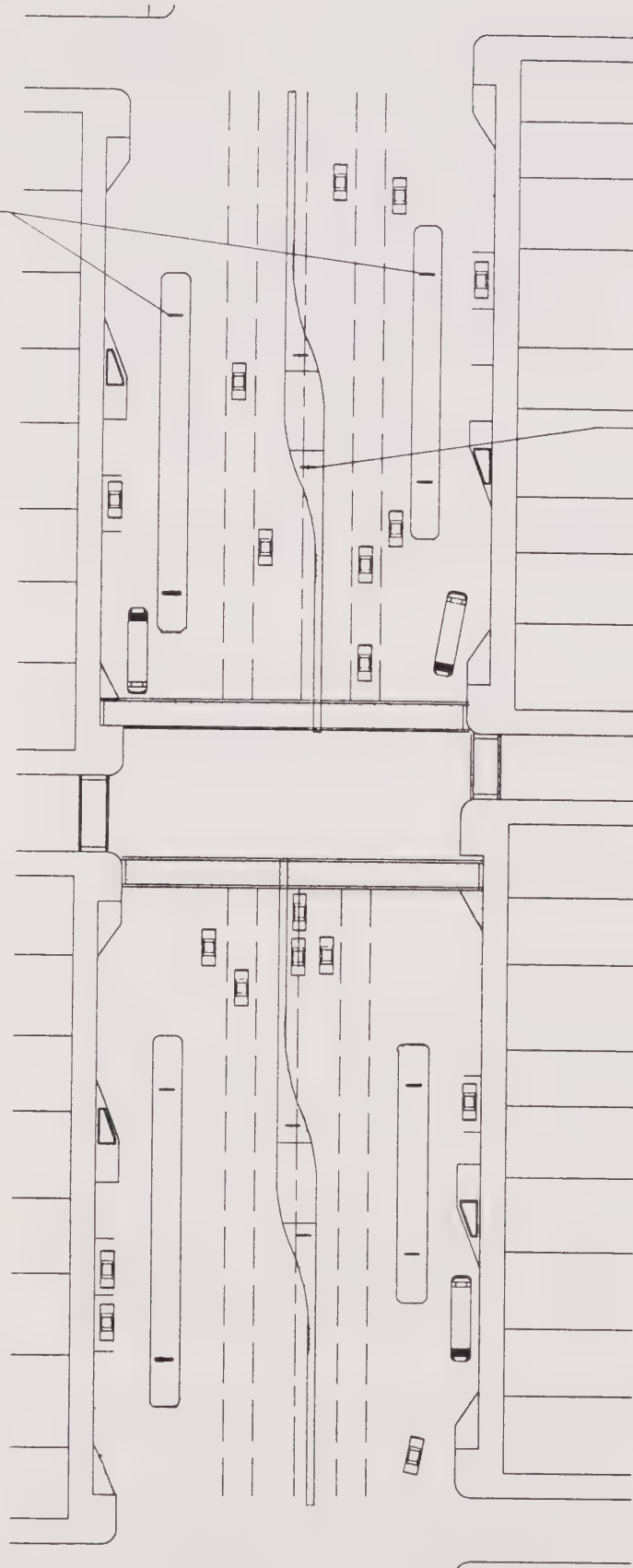


North District Signage Locations

figure N

Type C sign
Commercial
roadway signage
Typical for
outside median

Type B sign
Street signage
Typical for
central median



South District Signage Locations

figure O

- d. No window sign shall occupy more than twenty (20) percent of the total area of the window in which the sign is located.

This provision shall not restrict the reasonable application upon the glass surface of a door or window of lettering or decals giving the address, hours of business, entrance or exit information, professional or security affiliations or memberships, credit cards which are accepted, or other similar information, nor shall the surface area of such lettering or decals be included in the overall computation of allowable window signs.

- e. No roof sign shall be permitted.
- f. No sign or any part of a sign (excluding signs located wholly within a building) shall move or create the illusion of movement in any manner.
- g. An illuminated sign or lighting device shall employ only lights of constant intensity and no sign shall be illuminated by or contain flashing intermittent, rotating or moving lights or lights creating an illusion of movement.
- h. No sign shall be either directly or indirectly illuminated in such a manner as to affect adversely the use and enjoyment of nearby property.
- i. No signs (excluding signs located wholly within a building) shall be erected or maintained on any premises, except to identify the building or to state the name of the person or entity occupying the premises and the product or service offered.
- j. Awnings are permitted. The only sign(s) allowed on an awning(s) shall be the name of the store, logo, and the street number, and the combined area of such sign(s) in excess of fifteen (15) square feet must be counted as part of the total area allowed that building for its exterior signs.
- k. Signs painted directly on the surface of a building are prohibited.
- l. Non-illuminated signs not exceeding six (6) square feet in surface area displayed strictly for the direction, safety or convenience of the public, including signs which identify rest rooms, parking area entrances or exits, freight entrances, addresses or similar signs are exempt from these provisions.

- m. In regard to temporary signs, one non-illuminated real estate sign not exceeding ten (10) square feet in area advertising the sale or lease of non-residential property may be located on each street frontage of said property. Such signs which shall be removed within seven (7) days after the completion of the advertised sale or lease are exempt from these provisions.

One non-illuminated construction site sign not exceeding ten (10) square feet in area identifying the parties engaged in the design or construction on a lot or premises where construction or remodeling is in progress may be located on each street frontage of said property. Such signs which shall be removed within seven (7) working days after the completion of such work are exempt from these provisions.

Decorations connected with civic, patriotic, or religious holidays may be displayed no more than forty (40) days prior to, nor more than seven (7) working days after the appropriate holiday. Such decorations are exempt from these provisions.

- n. Commercial Center Monumentation signs are subject to the size restrictions of (b.) and (c.) above. These monumentation signs shall not be counted against the wall sign regulations found in (b) and (c) of this section (Commercial Center shall mean a use or group of uses with a combined building area of at least 40,000 square feet.).
- o. No sign shall extend more than 15 feet above record grade for signs associated with 2 story and less buildings nor above the third floor of a multistory building (3 stories or more), except that motels/hotels, and other transient lodgings may display such signs up to 40 feet above record grade.
- p. All signs shall be located within, or shall extend not more than eighteen (18) inches from the wall of any building; and any sign attached to the wall of a building shall be attached in such a manner that the face of the sign is substantially parallel to such wall and shall not include any message on that portion of the sign extending from the building.

Non-conforming, existing signs shall comply with the following amortization schedule:

All signs projecting from a building in such a manner that the face or faces of the sign are not substantially parallel to the face of the building must be removed along with all hanging

or mounting apparatus within twenty-four (24) months from the adoption date of this plan.

Single face signs attached to a wall in such a manner that the face of the sign is substantially parallel to the wall, which do not comply with the provisions outlined above must be removed or made to comply with said provisions within twenty-four (24) months from the adoption date of this plan.

Window signs must be removed or made to conform to the provisions of this plan within ninety (90) days from the date of its adoption.

Painted wall signs must be removed within twenty-four (24) months from the adoption date of this plan.

All other signs not in compliance with these provisions must be removed or put in compliance of this plan within twenty four (24) months from the date of its adoption.

Any person, business or entity found in violation of these guidelines by the Community Development Department shall be subject to a fine of not less than \$50.00 or more than \$500.00, and each day's failure to comply with any such provisions shall constitute a separate offense.

Building Placement and Scale

Currently, Hawthorne Boulevard is not a well defined shopping and commercial area. One reason for this is its wide right-of-way and lack of definitional space. The width of the right-of-way extends from one-hundred seventy (170) feet to one-hundred ninety-five (195) feet, which perpetuates the lack of spacial definition. Building placement techniques can improve the perception of space by creating "walls" along the right-of-way, thereby giving the visitor a sense of uniformity and scale. Urban designers refer to this as "positive space." Positive space is also created with plazas and courtyards. The intent of this Specific Plan is to create positive space throughout the Hawthorne Boulevard Corridor through the use of building placement and plaza location.

The preferred building placement and scale are described in this section. Illustrations of the placement and scale are used to better visualize the intended effect. New projects shall be consistent with these Urban Design Guidelines.

Street Space

The ratio of the height of buildings to the width of the street is the proportion most commonly used to regulate street space. A large right-of-way width requires a minimum building to street width ratio of 1:4. In this regard, proper building heights equivalent to five (5) stories in the North and Central District is desired. Desired street space ratios and structural locations are illustrated in Figure P. Structures should be located as close to the right-of-way as possible. For the South District, a height of four (4) stories is appropriate.

Building Scale

When street wall height effectively channels the street space, the next step is providing the pedestrian with the appropriate dimensions of height and length: Scaled features must be established both vertically and horizontally. These features must be expressed in three dimensions. In order to "read" the building in easy, comprehensible terms, the following guidelines (Figure Q) should be followed:

- Provide physical relief utilizing projections along the facade at the first floor (pop outs, awnings, etc.).
- Provide recessed entries and window openings.
- Provide plazas accessed from the sidewalk and sufficiently framed by structures. Plazas should connect to residential and parking areas.
- Any structure over the street space height to width ratio should off-set itself at least fifteen (15) feet on the floors exceeding the desired building height for that area.

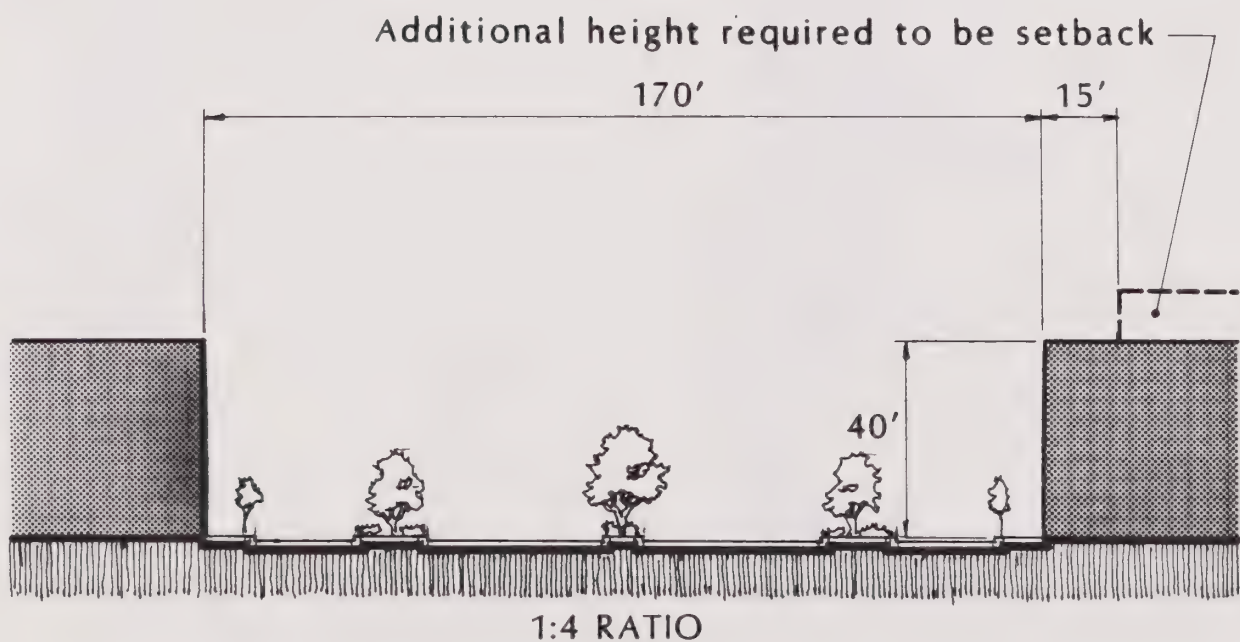
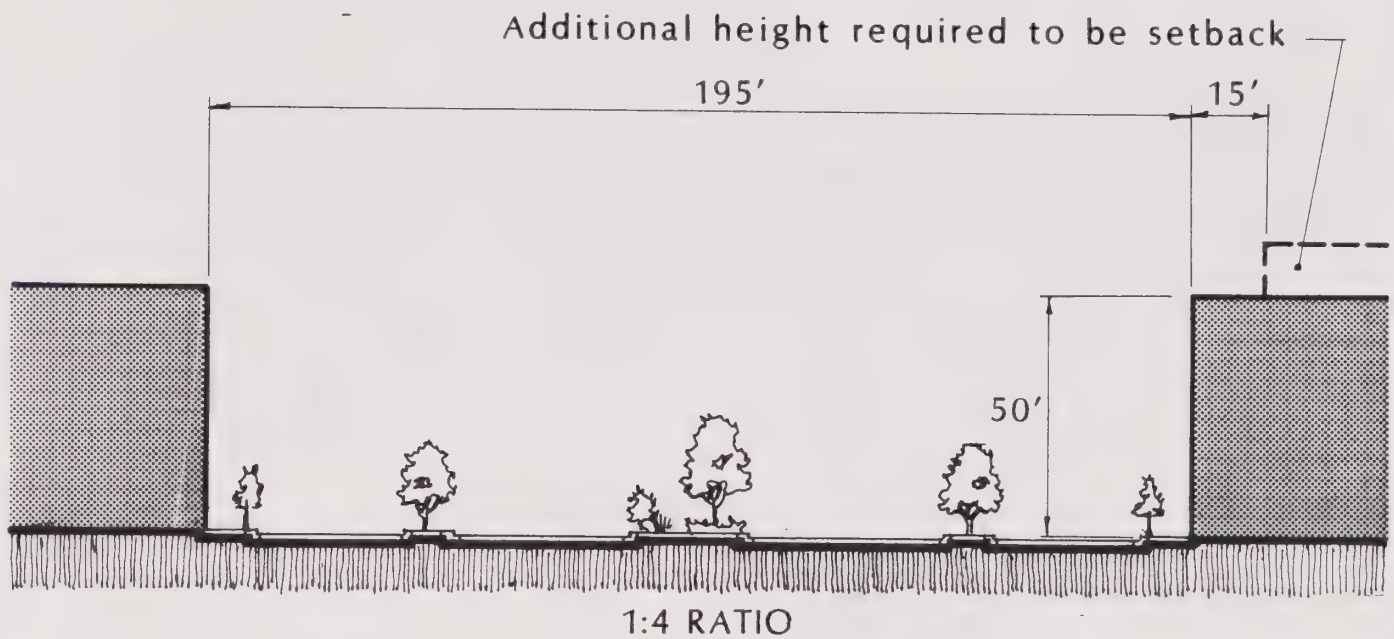
Plazas

Plazas act as urban open space and provide visual relief. Plazas should be interspersed throughout the Corridor. Plazas should be designed to act as connectors, social nodes, (Figure R) and buffers between commercial cores and residential uses.

Landscaping and Lighting

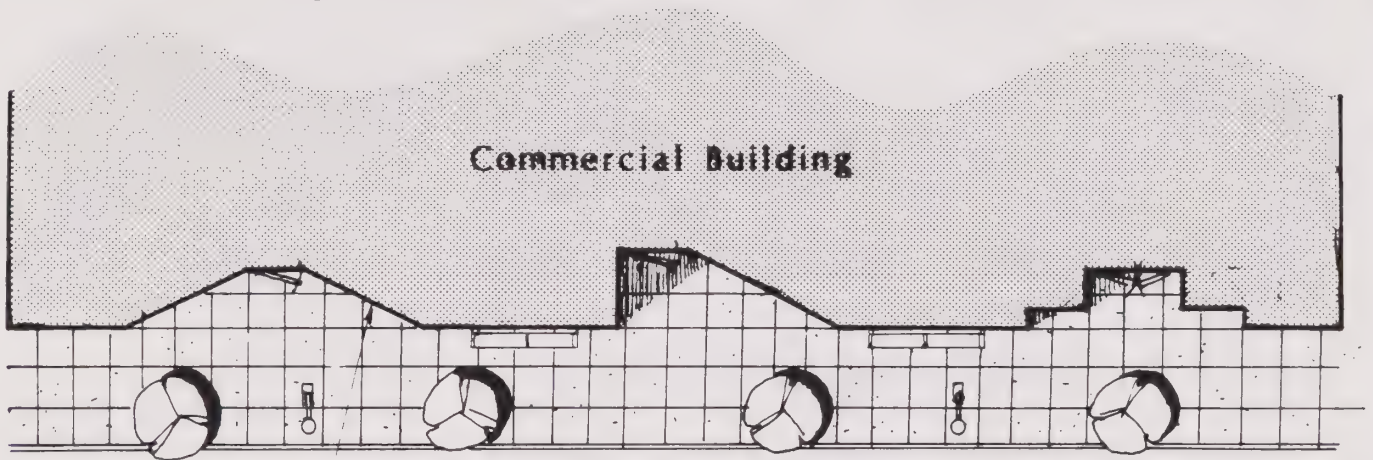
As with other urban design features discussed in this Specific Plan, landscaping and lighting must contribute to the overall plan area's uniformity and scale. Additional benefits of landscaping and lighting include health and safety features as well as automobile and pedestrian buffering.

The Hawthorne Boulevard Corridor Specific Plan Overlay "Typical" District Landscape Concept Plan is illustrated on Figures S through U. Uniform median plantings and lighting along the pedestrian areas are desired. A plant palette for each District is shown in Table 3. All

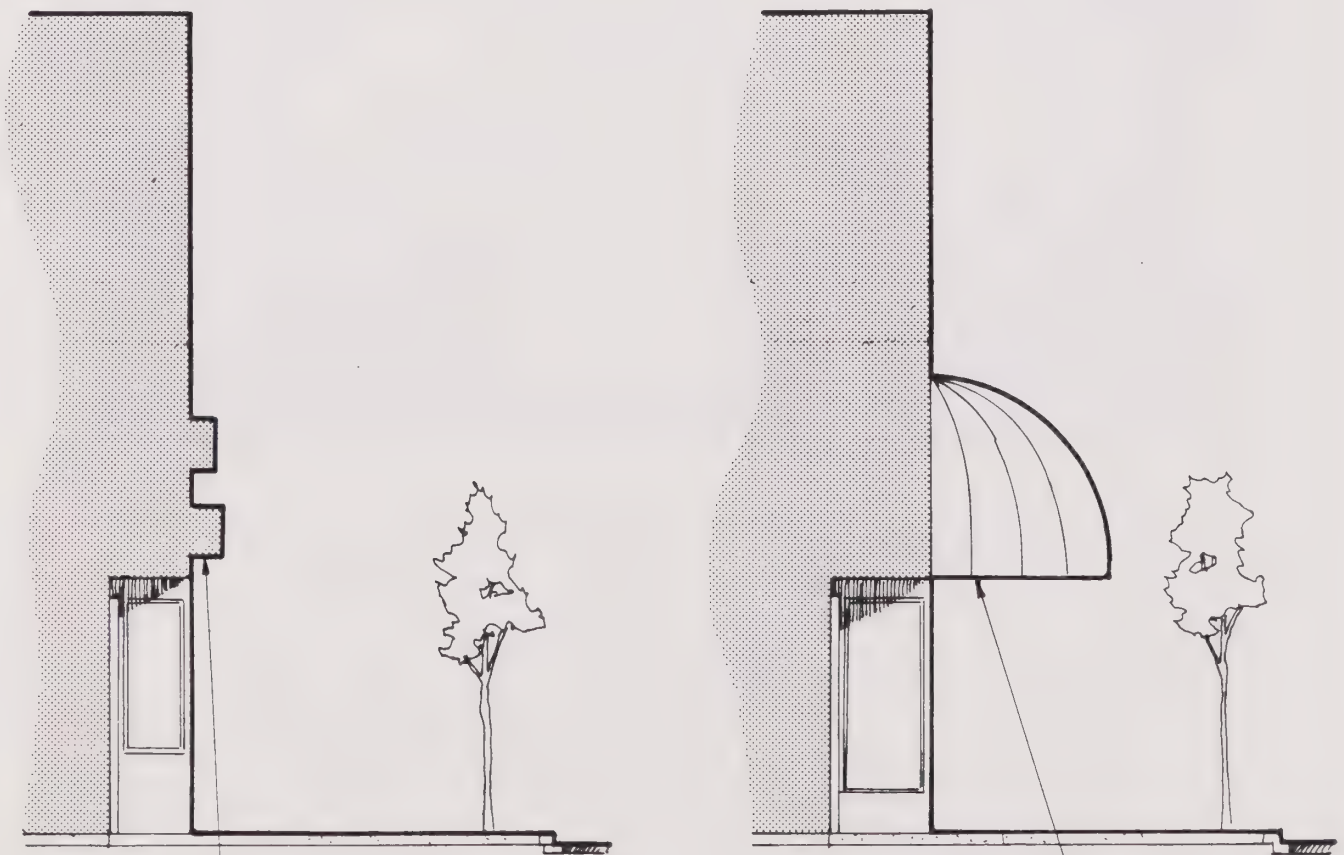


Ratio of Building Height to Street Width

figure P



Horizontal pedestrian scale building features



Vertical pedestrian scale building features

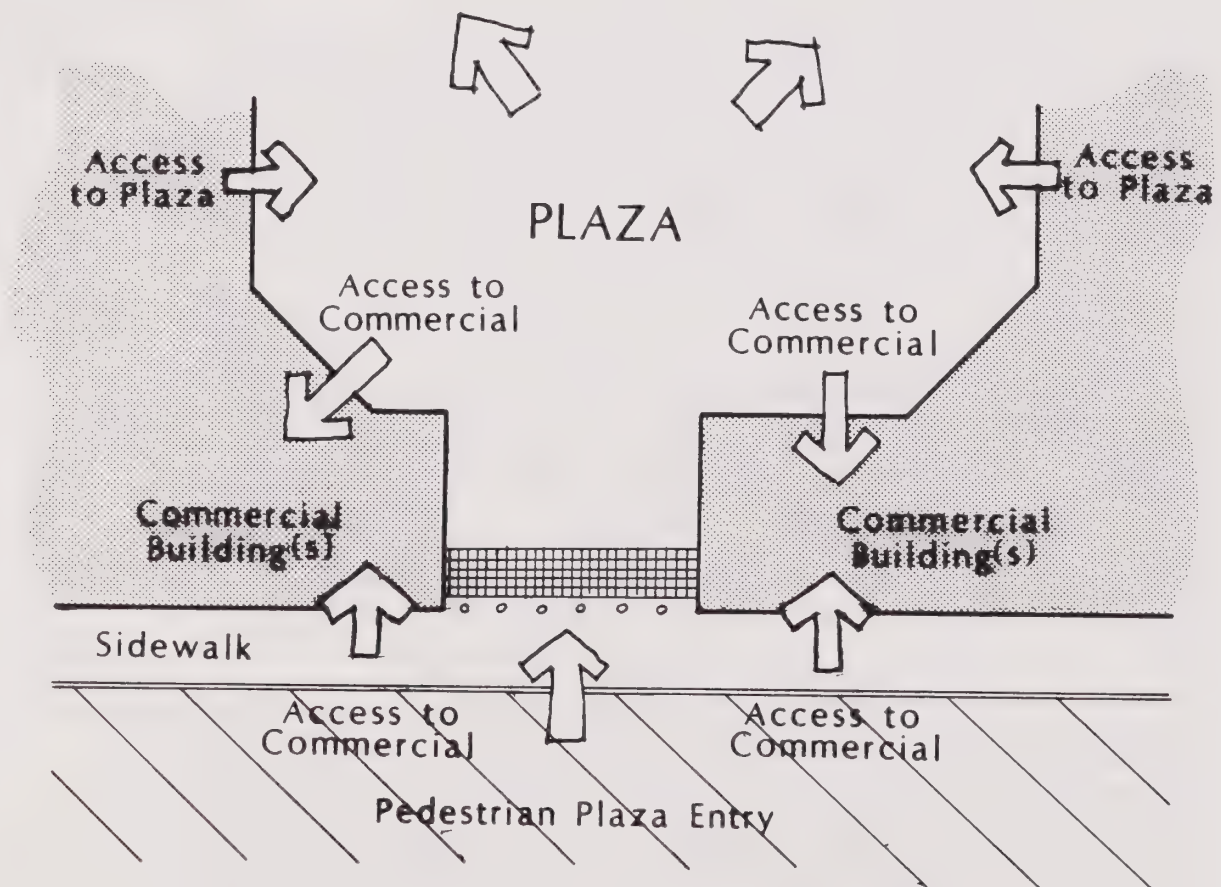
Pedestrian Scale Features

figure Q

Plaza Features:

- Seating
- Food Court
- Landscaping
- Enhanced hardscape

Access to Parking, Residential, & Commercial



Typical Plaza Concept

figure R

Table 19
Residential Land Use Classifications

<u>Land Use Classification</u>	<u>Density Range</u>	<u>Typical Unit Type</u>
Single-Family Low Density	0-8.8 du/ac	Single-Family Detached
Single-Family Medium Density	8.9-17.5 du/ac	SingleFamily/Duplex/ Double Units
Medium-Family Low Density	8.9-17.5 du/ac	Townhomes/Apts.
Medium-Family Medium Density	17.6-33.0 du/ac	Condominium Apts.
Medium Family		

**Governmental
Constraints**

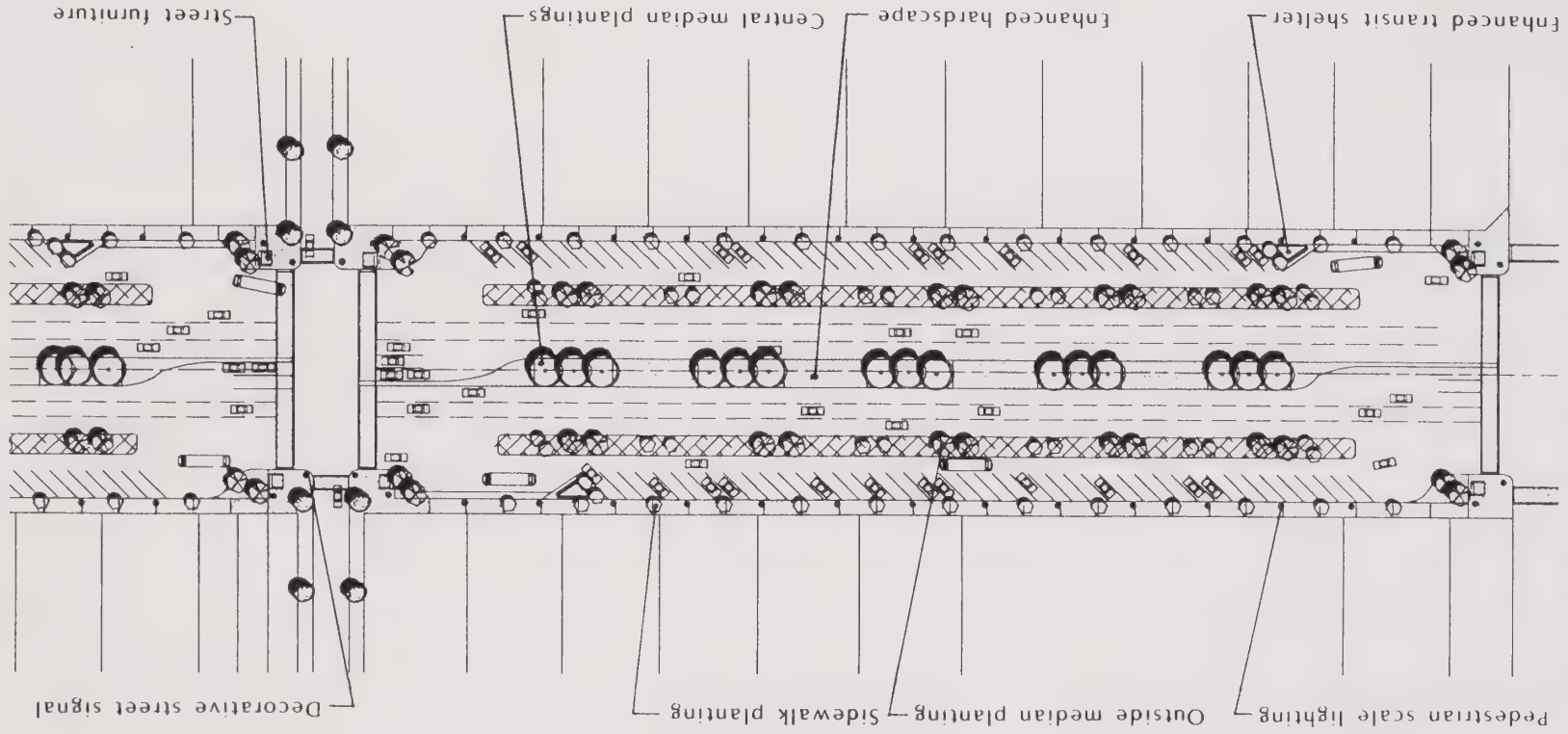
Potential and actual governmental constraints upon the maintenance, improvement and development of housing for all income levels includes land use controls, codes, fees and other requirements of building permitting. Typically, the General Plan, development review process and fees for development pose any governmental constraints that may be present in the City.

The Lawndale General Plan supports the conversion of industrial lands to residential, increased densities and fast track permit processing for qualifying projects. One General Plan constraint on the provision of housing is related to public facilities. Policy language forbids development where adequate public facilities are not demonstrated. This constraint however, is consistent with the maintenance and improvement of the public infrastructure system and overall quality of life for Lawndale.

Lawndale's development review process poses a minor constraint for the provision of housing. requirements placed upon new housing developments to ensure conformance with the General Plan and Zoning Ordinance can increase costs of development, depending upon the conditions of approval (i.e., undergrounding utilities, minimum unit size, etc.). In many cases, however, the costs are offset by the processing times for development review, which are shorter in length than is typical in other jurisdictions. Rehabilitation of existing units are encouraged by the City. The City offers low cost loans for rehabilitation and are currently formulating a grant program to assist in rehabilitation efforts.

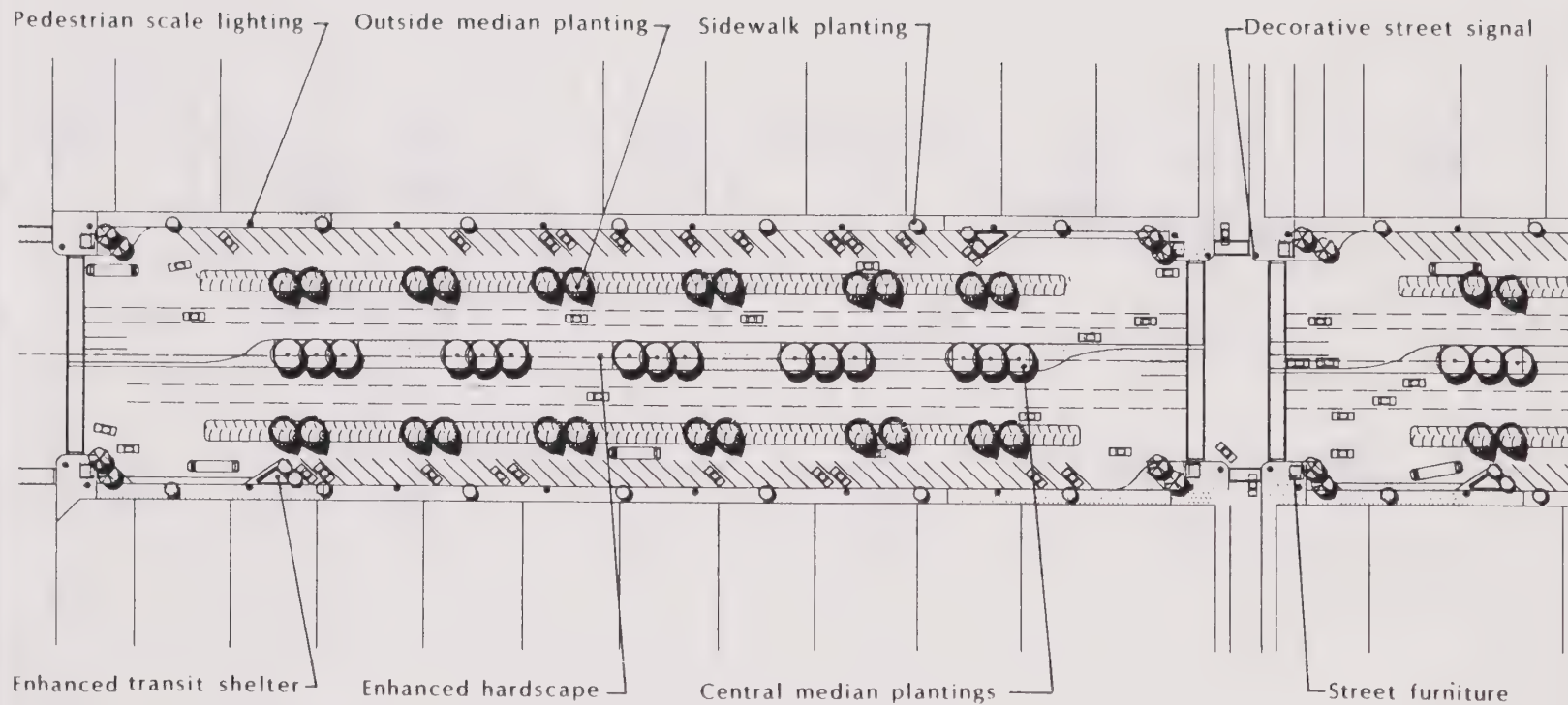
Central District
Landscape
Concept Plan

figure 5



(For preferred species, see Table 3)



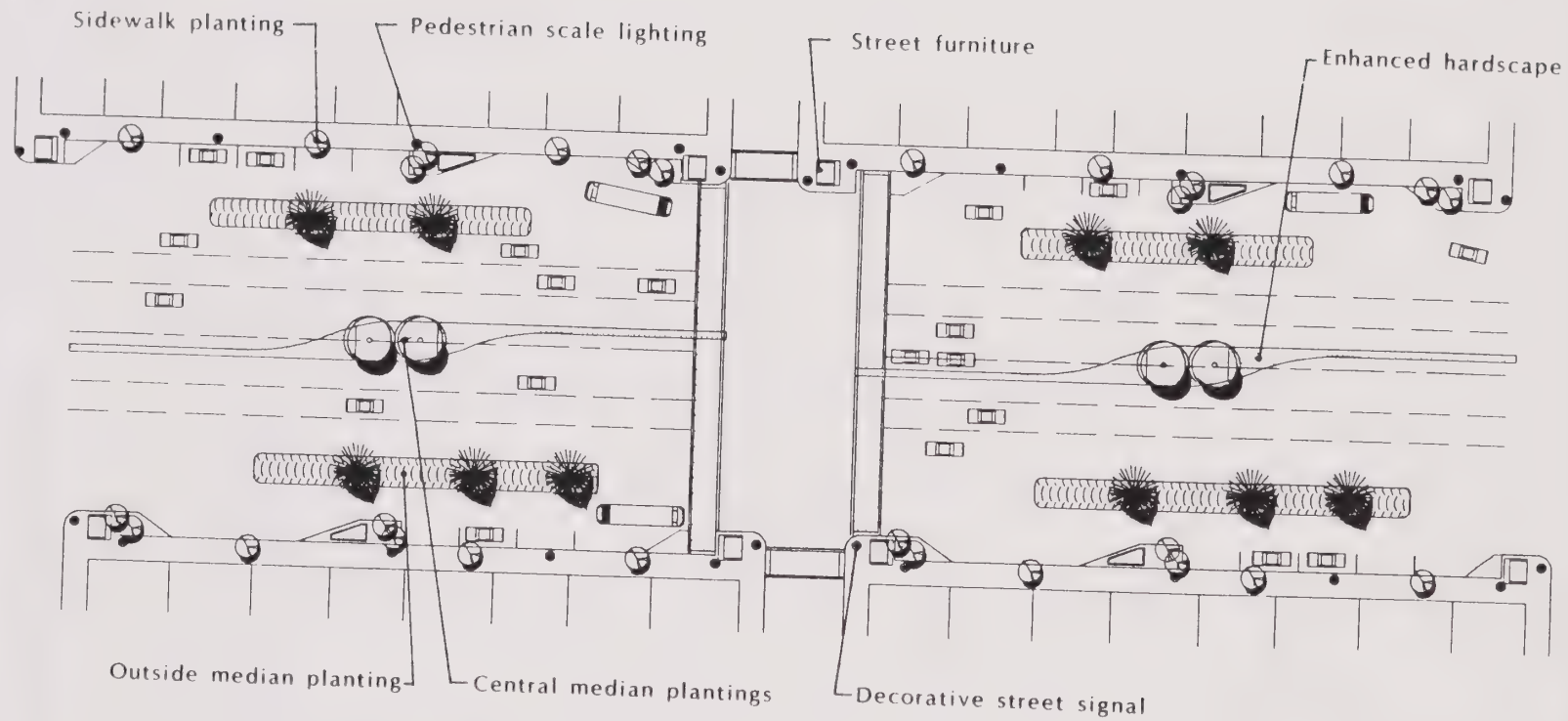


(For preferred species, see Table 3)



North District Landscape Concept Plan

figure T



(For preferred species, see Table 3)

L A W N D A L E G E N E R A L P L A N



South District Landscape Concept Plan

figure U

Preferred Plant List			
Districts:	Central	North	South
Central Median			
Trees:			
Pinus canariensis-Canary Island Pine	*	*	*
Pistacia chinensis-Chinese Pistache	*	*	*
Shrubs:			
Agapanthus orientalis-Lily-Of-The-Nile	*		
Dieties 'Bicolor'-Yellow Fortnight Lily		*	*
Hemerocallis hybrids-Day Lily	*		
Pittosporum tobira 'Wheeler's Dwarf'- Dwarf Mock Orange	*		
Raphiolepis indica-India Hawthorn		*	*
Strelitzia reginae-Bird-Of-Paradise	*		
Ground Covers:			
Lantana montevidensis-Trailing Lantana	*	*	*
Rosmarinus officinalis-Rosemary		*	*
Trachelospermum Jasminoides-Star Jasmine	*		
Outside Median			
Trees:			
Cinnamomum camphora-Camphor Tree	*		
Jacaranda mimosifolia-Jacaranda		*	*
Platanus racemosa-California Sycamore		*	*
Shrubs:			
Agapanthus orientalis-Lily-Of-The-Nile	*	*	*
Arctostaphylos 'Edmundsii'-Manzanita		*	*
Carissa macrocarpa 'Tuttle'-Compact Natal Plum	*		
Ceanothus griseus horizontalis-Carmel Creeper		*	*
Pittosporum tobira 'Wheeler's Dwarf'- Dwarf Mock Orange	*		
Strelitzia reginae-Bird Of Paradise	*		
Ground Covers:			
Lantana montevidensis-Trailing Lantana	*	*	*
Rosmarinus officinalis-Rosemary		*	*
Trachelospermum jasminoides-Star Jasmine	*		
(continued on next page)			

Preferred Plant List

table 3

Preferred Plant List (continued)			
Districts:	Central	North	South
Sidewalk			
Trees:			
Hymenosporum flavum-Sweet Shade	*	*	*
Pyrus calleryana 'Aristocrat'-no common name	*	*	*
Shrubs:			
Agapanthus 'Peter Pan'-Dwarf Lily-Of-The-Nile	*	*	*
Cycas revoluta-Sago Palm	*		
Dieties 'Bicolor'-Yellow Fortnight		*	*
Ceanothus griseus horizontalis-Carmel Creeper		*	*
Hemerocallis hybrids-Day Lily	*		
Pittosporum tobira 'Wheelers Dwarf'- Dwarf Mock Orange	*		
Rhapheolepis indica-India Hawthorn	*		
Ground Covers:			
Asparagus densiflorus 'Sprengeri'- Sprenger Asparagus	*		
Fragaria chiloensis-Wild Strawberry	*		
Lantana montevidensis-Trailing Lantana		*	*
Rosmarinus officinalis-Rosemary		*	*
Trachelospermum jasminoides-Star Jasmine	*	*	*
Entry Node			
Trees:			
Liquidambar styraciflua 'Palo Alto'-American Sweet Gum			
Sequoia sempervirens-Coast Redwood			
Shrubs:			
Agapanthus orientalis-Lily-Of-The Nile			
Dieties 'Bicolor'-Yellow Fortnight Lily			
Hemerocallis hybrids-Day Lily			
Pittosporum tobira 'Wheeler's Dwarf'-Dwarf Mock Orange			
Strelitzia reginae-Bird Of Paradise			
Ground Cover:			
Fragaria chiloensis-Wild Strawberry			

Note: All species listed are considered drought tolerant.

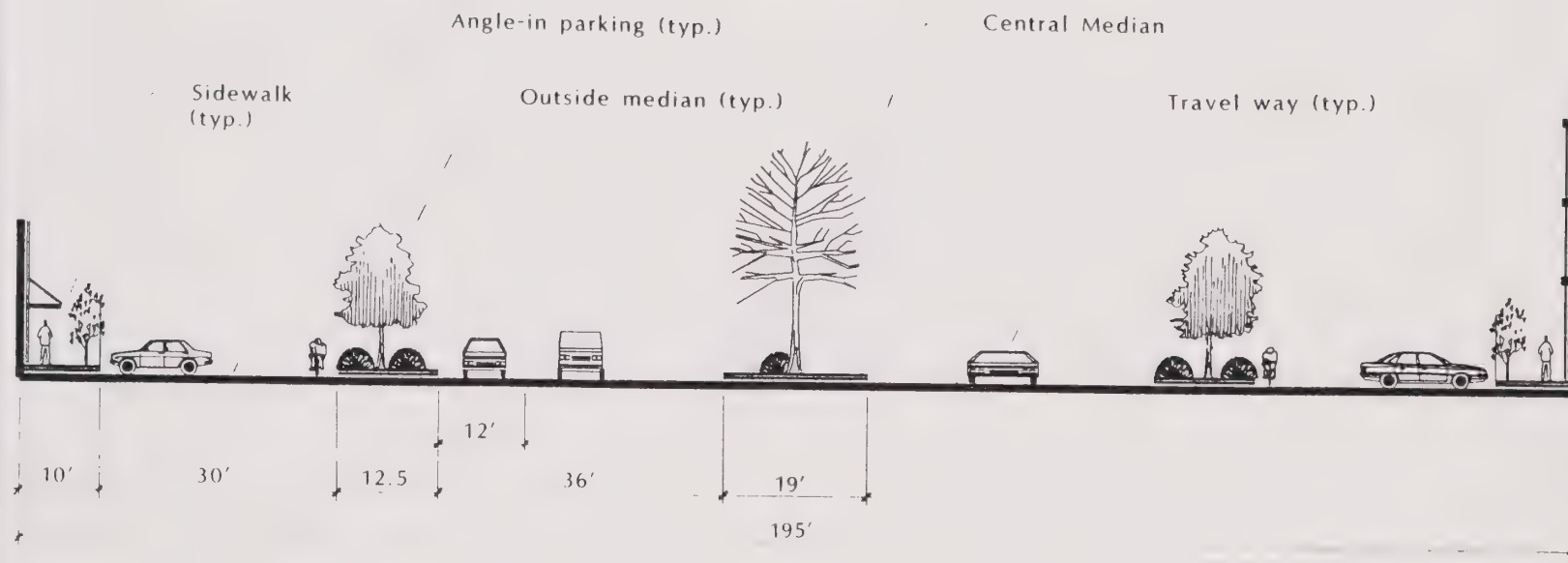
Preferred Plant List (continued)

table 3

landscaping and lighting improvements should incorporate the desired landscaping and lighting features. Public lighting and street furniture shall be complementary to the Design features presented in these Urban Design Guidelines.

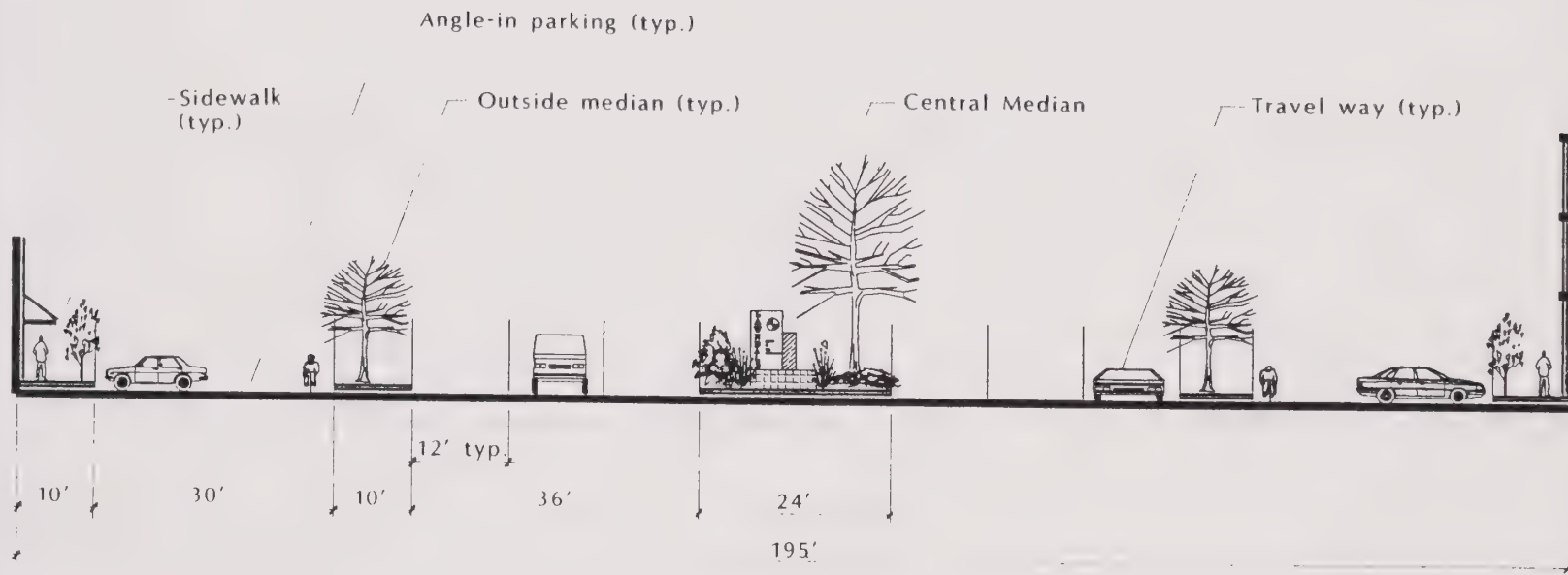
APPENDIX

Street Improvements



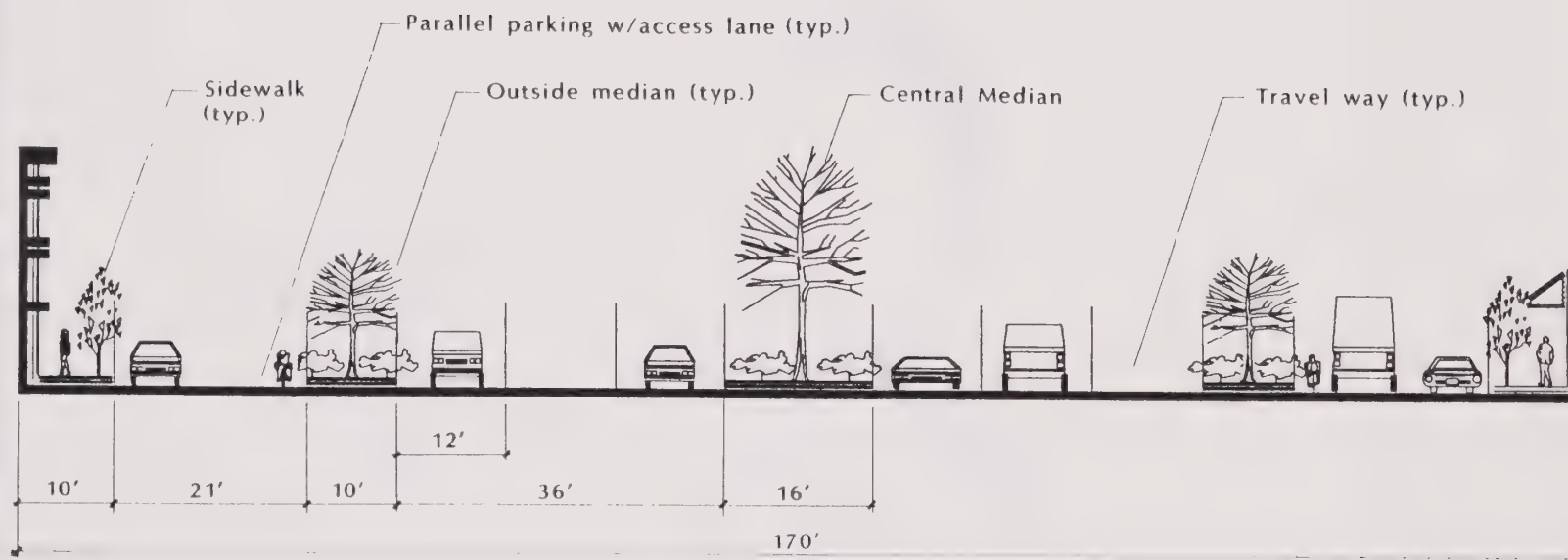
Hawthorne
Boulevard
Central District
Cross-section

figure AA



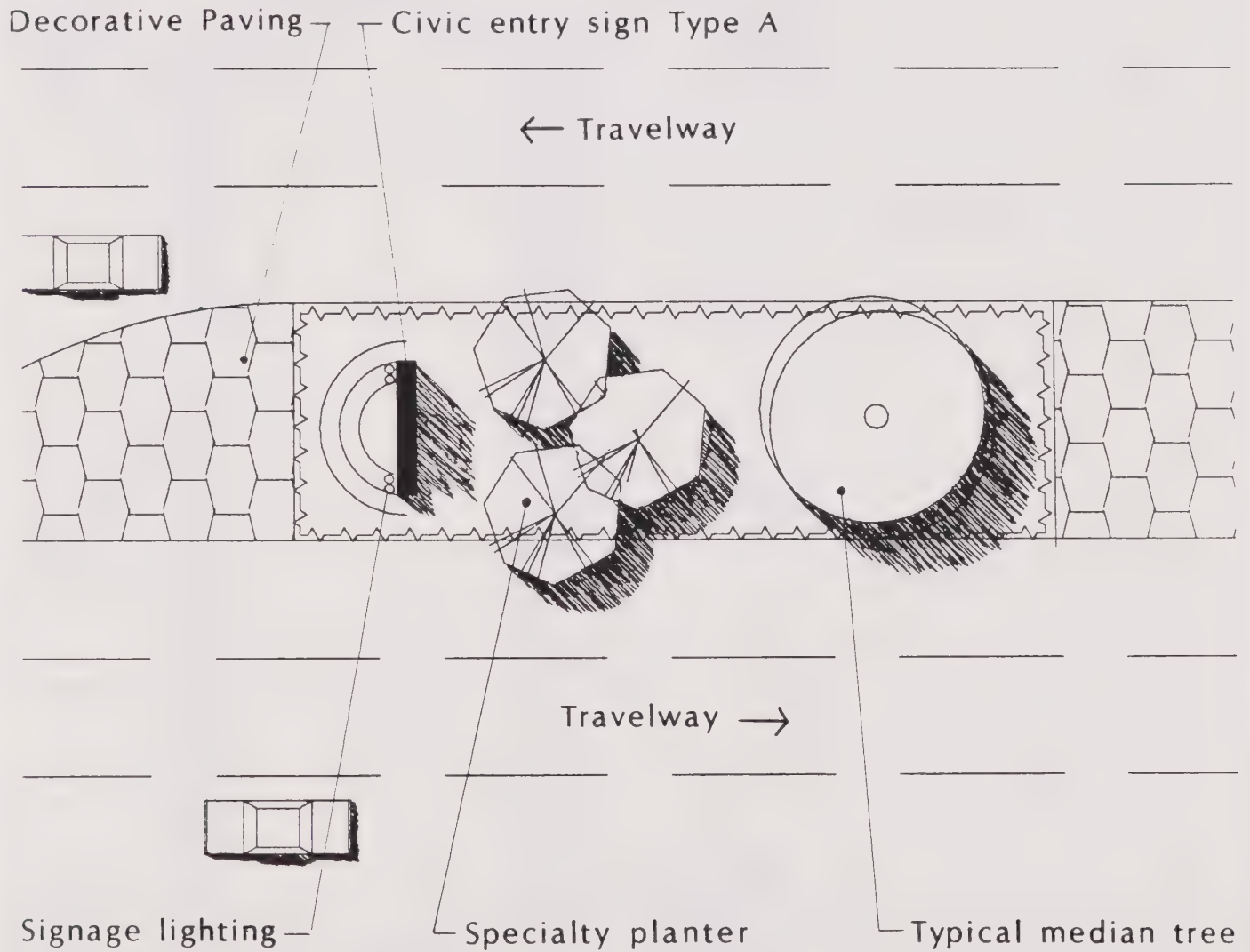
Hawthorne
Boulevard
North District
Cross-section

figure AB

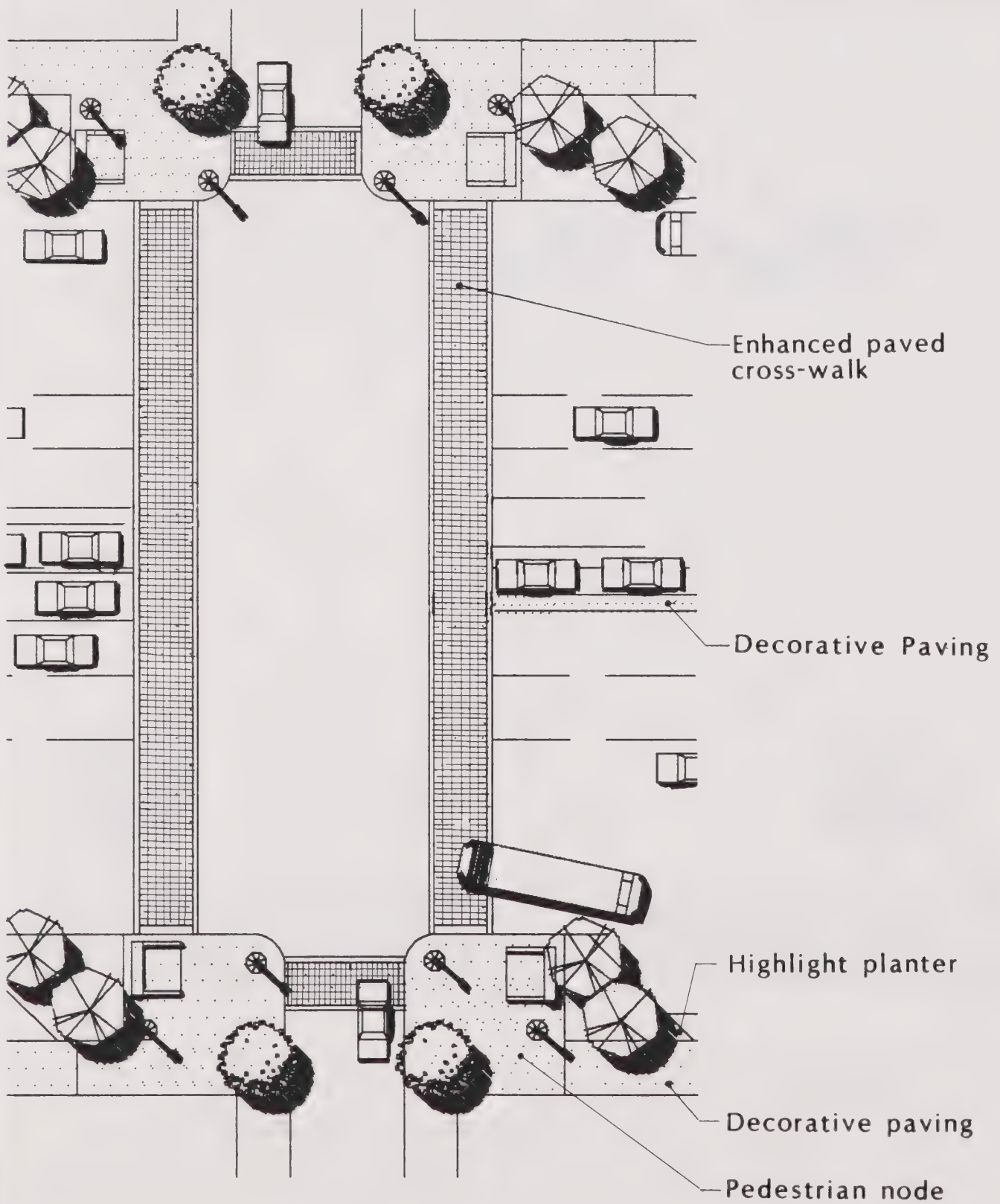


Hawthorne
Boulevard
South District
Cross-section

figure AC

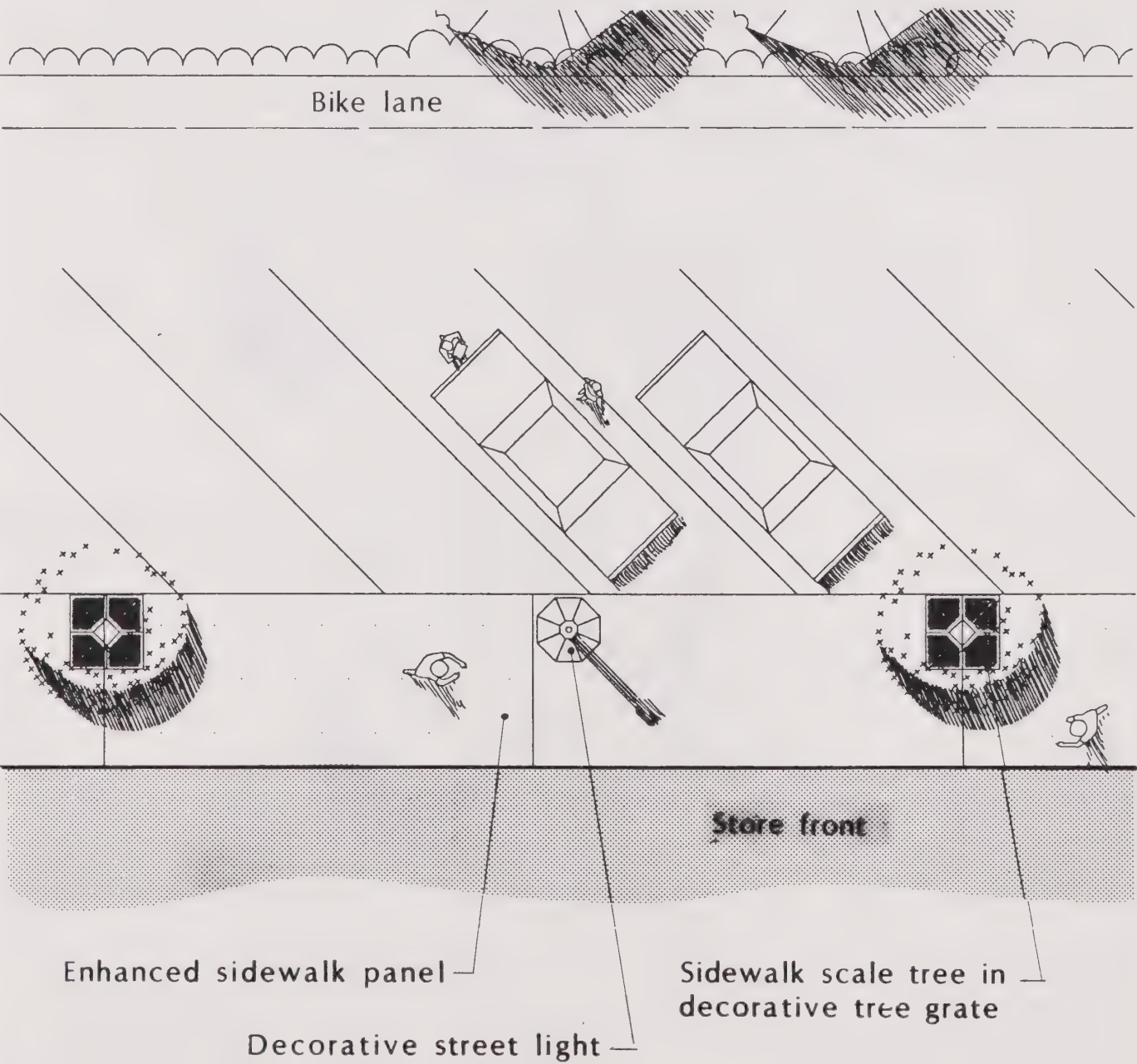


Civic Gateway
figure AD



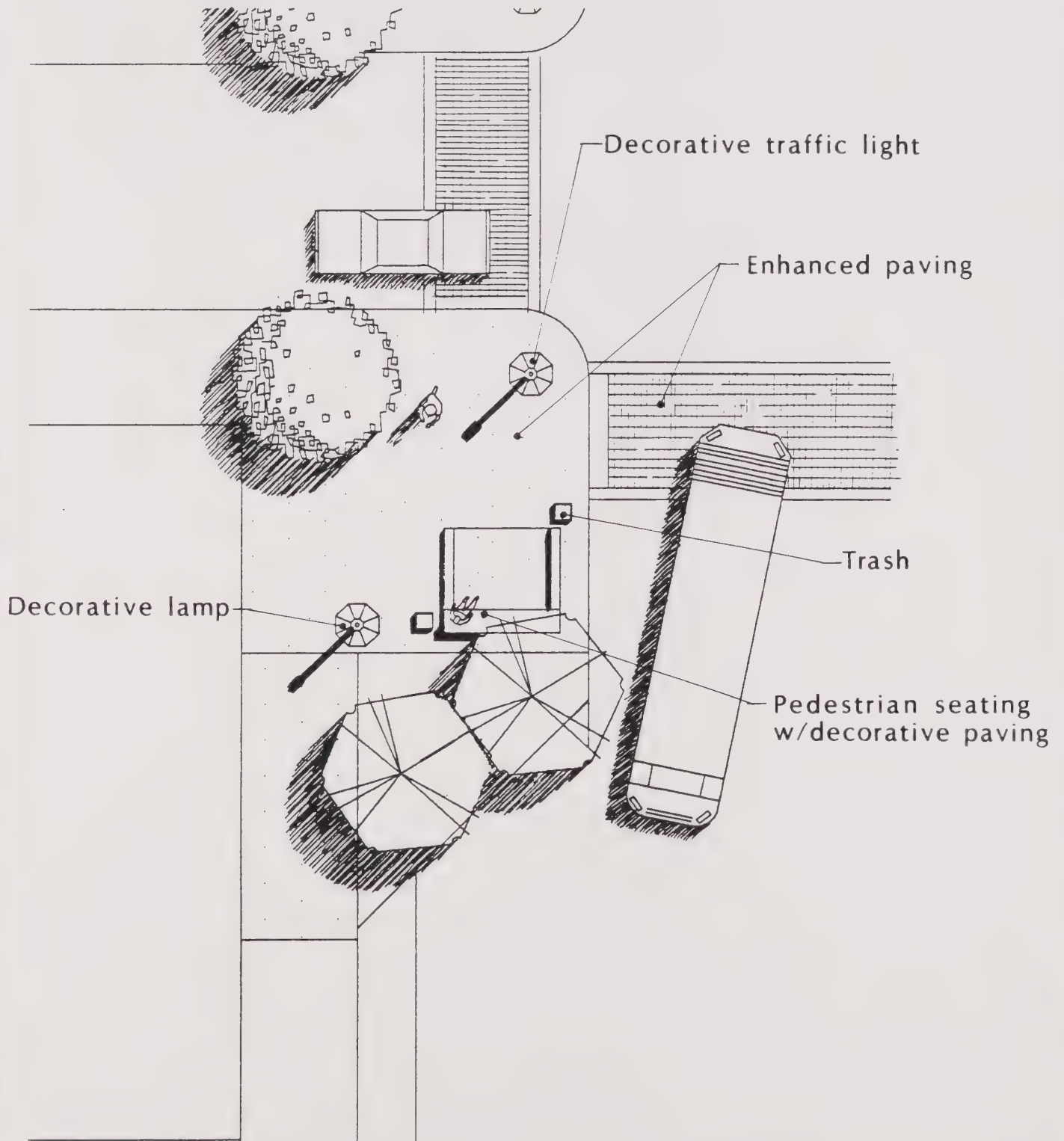
Enhanced Intersection

figure AE



Central District Enhanced Sidewalk

figure AF



Pedestrian Node

figure AG

CIRCULATION ELEMENT

II. COMMUNITY DEVELOPMENT

3. Circulation Element

Introduction

Overview

The City of Lawndale is an urban community of 27,331 residents and occupies approximately 1.9 square miles in southwest Los Angeles County. Figure A presents the location of Lawndale on a regional level. The City is part of the locationally desirable South Bay area, affording good access to major employment centers, a number of regional shopping centers as well as the ocean/beaches recreational area.

The circulation system of a community is vital to its prosperity. Its function is to provide for the movement of goods and people which could include pedestrian, bicycle, transit, train, and automobile traffic flows within and through the community. Since good traffic circulation is important to economic viability and the creation and preservation of a quality living environment, it is important that it occurs in a most efficient manner. The Circulation Element of the General Plan provides the community with a general guide to improve and maximize the effectiveness of its circulation system.

Authority

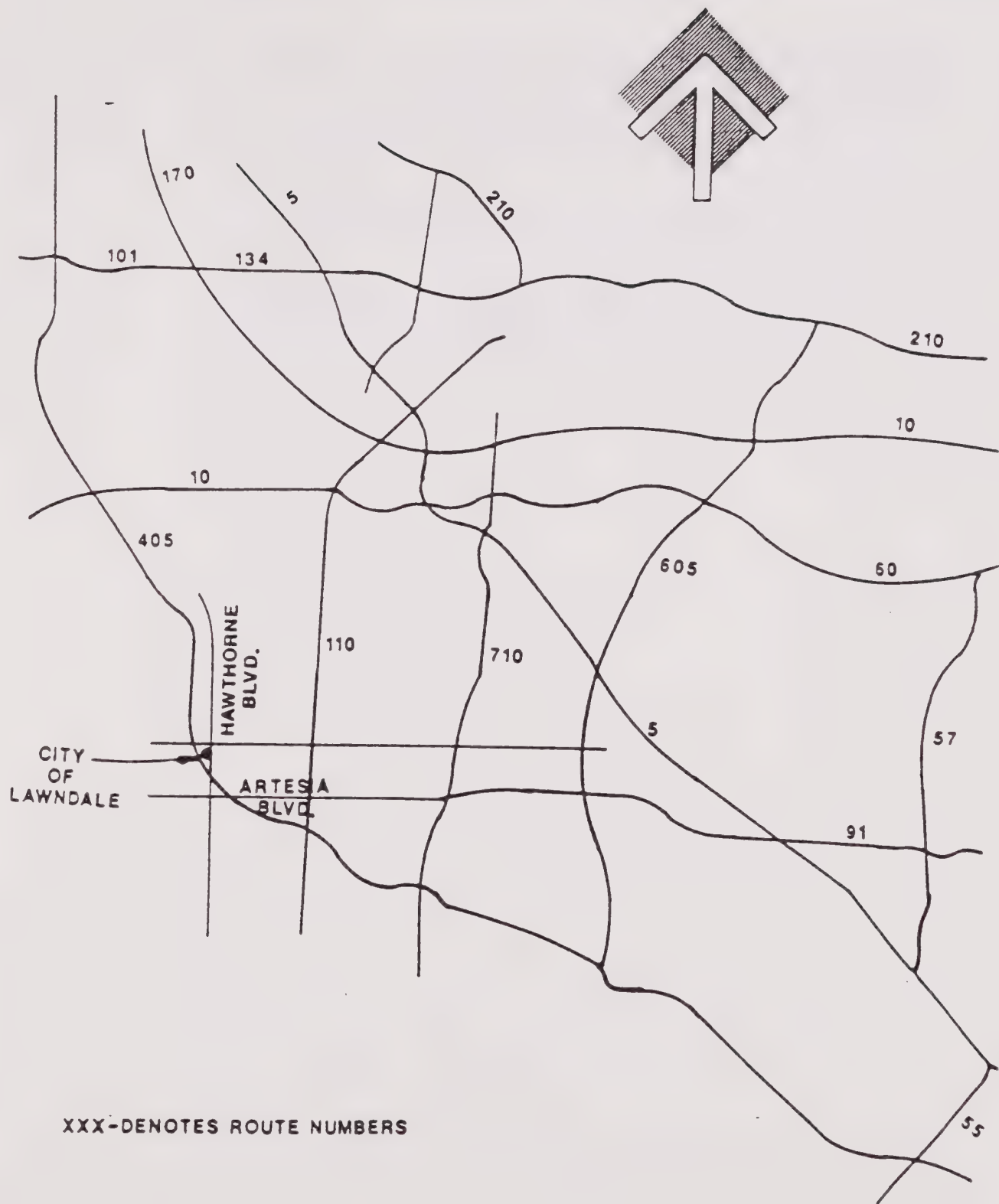
Pursuant to Government Code Section 65302(b) a Circulation Element in all City and County General Plans is required as follows:

"A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and facilities, all correlated with the Land Use Element of the plan."

Organization

The Circulation Plan, upon adoption, serves as the Circulation Element's main policy tool, designating future road improvements, extensions, and special intersection design treatments. The Circulation Element shall also:

- Identify the transportation needs and issues within the City and those regional relationships that affect the City's transportation system.



Regional Arterial System

figure A

- Establish goals for the Element with objectives and policies to attain those goals.
- Describe the proposed circulation system in terms of geometric design elements, operating characteristics, and limits of operation including current standards, guidelines, and accepted criteria for the location, design, and operation of the transportation system.
- Consider alternatives other than the single-occupant vehicle as essential in providing services and access to facilities.
- Establish policies that coordinate the circulation system with planned land uses and provide direction for future decision making in the realization of the Circulation Element goals.

Assessment

Relationship to Other General Plan Elements

The Circulation Element, in conjunction with other General Plan Elements, designates the location and scale of existing and proposed transportation systems. The Circulation Element must support and be consistent with all elements of the General Plan. It is most closely coordinated with the Land Use, Noise, and Housing Elements.

The Noise Element quantifies and sets standards for the overall community noise environment and provides noise exposure information from transportation-related resources. The information and data is used as a guideline in the Land Use Element to achieve noise-compatible land uses. The planning of circulation systems and transportation alternatives is coordinated closely with the findings of both elements.

The Housing Element, in setting forth a plan for the provision of adequate sites for housing, is consistent with the Land Use Element, which defines the balance of land use for the entire community.

The Circulation Element, in designating transportation routes, ensures that access will be available for all land uses including business, industry, open space/recreation, and housing. Additional transportation improvements may be required to comply with the Air Quality Management Plan. Also, the Hawthorne Boulevard Corridor specific plan provides greater details on the design features and roadway improvements proposed for Hawthorne Boulevard.

The sections of the General Plan closely associated with the natural environment, such as the Conservation and Open Space Elements, may identify those areas that should be preserved for environmental reasons. The designation of scenic routes for enjoyment of the natural environment is coordinated with the Circulation Element.

For the reasons stated above, roadway improvements shown on the Master Transportation Plan are generalized and are not intended to show specific alignments. Where required for efficient circulation, specific alignments will be determined through further environmental, noise, and engineering studies.

Regional Relationships

Adjacent local agency's plans should be reviewed and commented upon whenever the opportunity arises to ensure compatibility of circulation systems which cross political boundaries.

Regional Circulation System

The circulation system serving the regional Los Angeles area has become well developed over the years and experiences considerable congestion, especially during the commuter peak periods. In order to accommodate increased traffic demands, the traditional "peak hour" has spread into a "peak period" which commonly occurs for three to five hours. The South Bay area, which includes the City of Lawndale, is currently served by a grid pattern of major and secondary highways, in addition to the freeways. The arterials, or major highways, generally run north-south and east-west and carry significant daily volumes in excess of 40,000 average daily trips (ADT). These include segments along Artesia Boulevard, Rosecrans Avenue and Inglewood Avenue. Hawthorne Boulevard carries daily traffic volumes in excess of 60,000 ADT. The regional network of major and secondary highways consists of the following significant streets in the area:

Hawthorne Boulevard	Marine Avenue
Inglewood Avenue	Manhattan Beach Boulevard
Prairie Avenue	Artesia Boulevard
Sepulveda Boulevard	Pacific Coast Highway
Crenshaw Boulevard	190th Street/Victoria
Western Avenue	El Segundo Boulevard
Vermont Avenue	Carson Street
Rosecrans Avenue	

In addition, there are two freeways in the area, the San Diego Freeway (Interstate 405) and the Harbor Freeway (Interstate 110). According to the latest traffic count data available from Caltrans, the San Diego Freeway carries daily traffic volumes ranging between 257,000 and 263,000 ADT (1989). The Harbor Freeway carries daily traffic volumes that range between 195,000 and 218,000 ADT. The relationship between Lawndale and the regional circulation network is depicted on Figure B.

Freeway access to the South Bay area is constrained mainly due to the few freeways now serving the area and surrounding development. A review of the Caltrans long range plan indicate the Century Freeway north of Lawndale will help relieve east/west congestion in the South Bay area. However, this would cause an increase in North/South travel in order to access the proposed freeway. Also, extension of the Artesia Freeway (SR91) west could provide regional relief.

Local Circulation

Since transportation within the City of Lawndale is primarily oriented toward the automobile, the Lawndale Circulation Element will place the focus on the roadway network serving the City. The local circulation

CITY OF LAWNDAL GENERAL PLAN



Regional Location Map

figure B

system in the city consists basically of four levels: Traffic utilizing local streets, collector streets, major highways, and freeways. Figure C illustrates how these four levels should function and relate to one another.

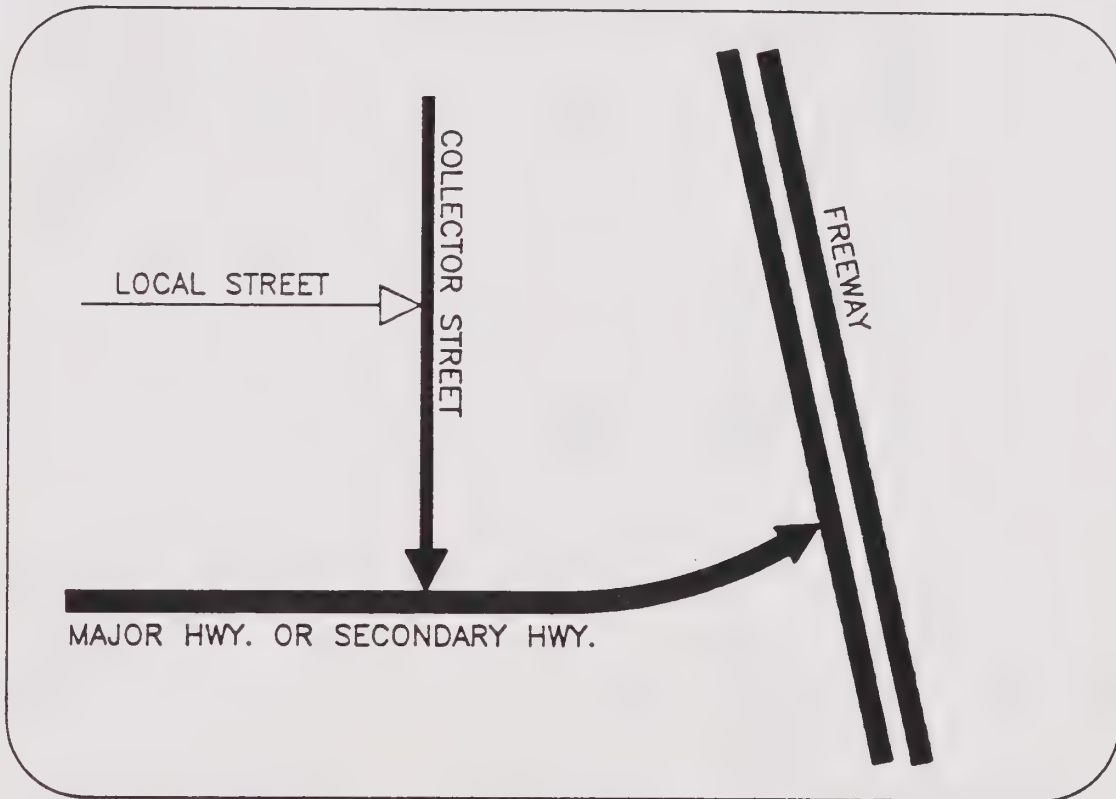
Major Highways

The backbone of the circulation system in Lawndale is the major and secondary highways transecting the City. Major highways are long distance, high volume thoroughfares which furnish connections between traffic generators such as employment centers and commercial areas and commonly provide access to freeway interchanges. Secondary highways carry somewhat lesser traffic volumes over shorter distances. Lawndale is transacted by eight major or secondary highways spaced approximately one-half mile apart. In addition, the San Diego Freeway bisects the city in a diagonal manner, northwest to southeast with on-off ramps (partial cloverleaf) at Inglewood Avenue, Hawthorne Boulevard and Redondo Beach Boulevard. Table 1 contains a summary of major highways, existing configuration, current daily traffic volumes, theoretical level of service (LOS) and daily capacities and associated volume to capacity (V/C) ratios. Figure D presents in graphic format the most recent daily traffic volumes on the major and secondary highways within the city.

As indicated on Table 1, there are a number of major highways currently operating at near or over capacity conditions. Hawthorne Boulevard between 166th Street and the South City limits currently carries daily traffic volumes that exceed the capacity of a six lane divided roadway. Inglewood Avenue between Marine Avenue and 162nd Street carry daily traffic volumes which exceed the capacity of a four lane divided roadway. Prairie Avenue between Rosecrans Avenue and Marine Avenue carries daily traffic volumes that slightly exceed the capacity of a four lane divided roadway. Marine Avenue west of Inglewood Avenue carries daily traffic volumes that exceed the capacity of a four lane undivided roadway. Artesia Boulevard between Inglewood Avenue and Redondo Beach Boulevard currently carry daily traffic volumes that significantly exceed the capacity of a four lane divided roadway. All other major highway segments within the City of Lawndale currently carry daily traffic volumes within capacity for their respective function classifications.

Collector and Local Streets

Feeding into the major street network of Lawndale's circulation system is an extensive network of local and collector streets which serve less intense land uses in the city. The system is basically a grid pattern consistent with that of the major streets. Figure E illustrates the local circulation system and the existing circulation plan. Traffic counts on some of the streets have been taken since 1985 and are shown in Figure D.



Hierarchy of Roadway Functions

figure C

CITY OF LAWNDAL GENERAL PLAN

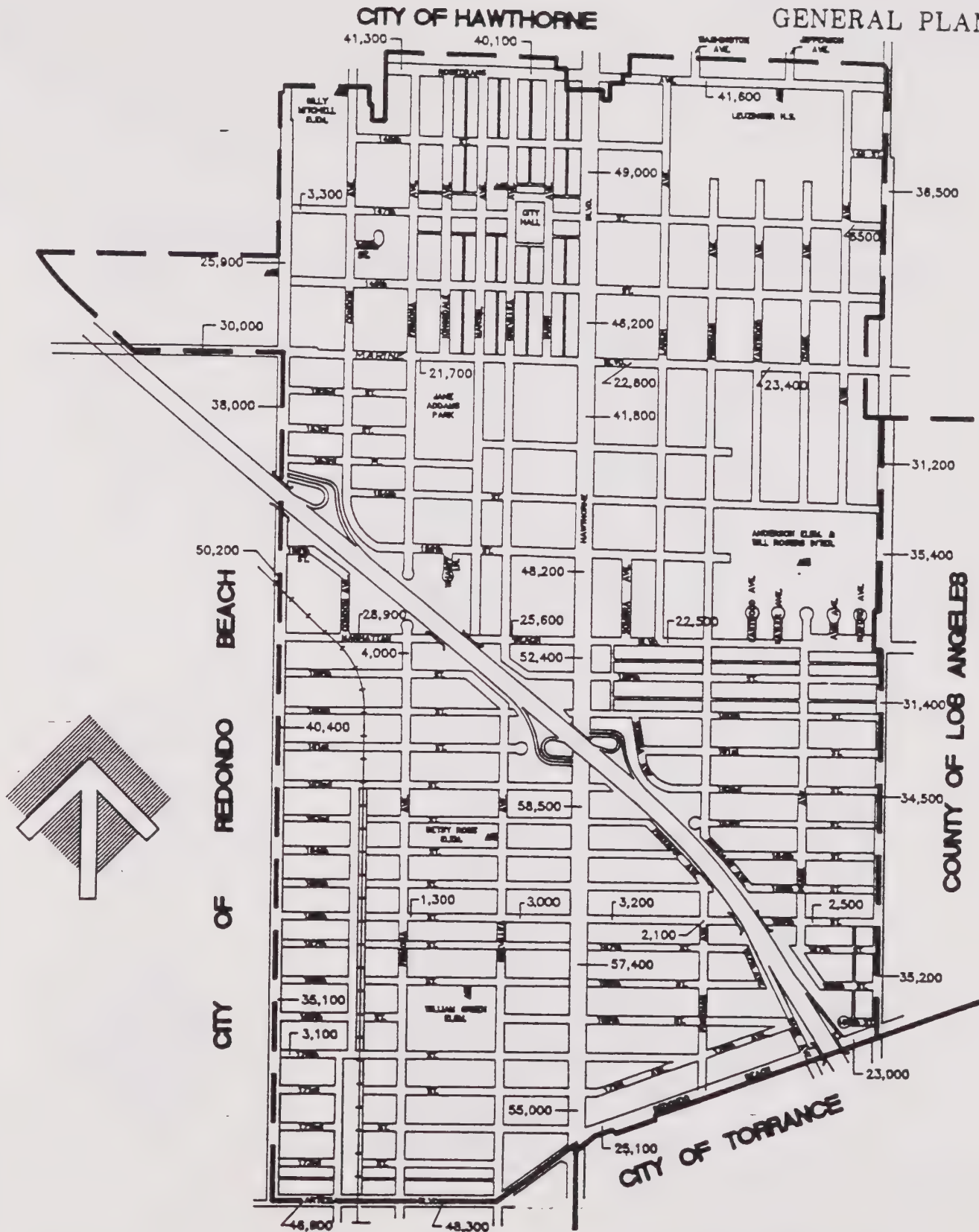
Existing Major and Secondary Highway Operations				
Street Segment	Existing Class ¹	LOS E Daily Cap. ²	Existing Daily Traffic Volume ³	V/C ⁴
Hawthorne Boulevard				
Rosecrans Ave./147th Street	6M	54,000	49,000	0.91
147th Street/Marine Avenue	6M	54,000	46,200	0.86
Marine Avenue/154th Street	6M	54,000	41,800	0.77
154th Street/Manhattan Beach Blvd.	6M	54,000	48,200	0.89
Manhattan Beach Blvd./I-405	6M	54,000	52,400	0.97
I-405/166th Street	8M	72,000	58,500	0.81
166th Street/170th Street	6M	54,000	57,400	1.06
170th Street/Redondo Beach Blvd.	6M	54,000	55,000	1.02
Inglewood Avenue				
Rosecrans Ave./Marine Avenue	4S	24,000	25,900	1.08
Marine Avenue/154th Street	4S	24,000	38,000	1.58
I-405/Manhattan Beach Blvd.	4S	24,000	50,200	2.1
Manhattan Beach Blvd./162nd Street	4M	36,000	40,400	1.12
162nd Street/Artesia Blvd.	4M	36,000	35,100	0.98
Prairie Avenue				
Rosecrans Ave./Marine Avenue	4M	36,000	36,500	1.01
Marine Avenue/154th Street	4M	36,000	31,200	0.87
154th Street/Manhattan Beach Blvd.	4M	36,000	35,400	0.98
Manhattan Beach Blvd./161st Street	4M	36,000	31,400	0.87
161st Street/166th Street	4M	36,000	34,500	0.96
166th Street/Redondo Beach Blvd.	4M	36,000	35,200	0.98
Rosecrans Avenue				
Inglewood Avenue/Firmona Avenue	4-6 ⁵ M	45,000	41,300	0.92
Firmona Avenue/Hawthorne Blvd.	4-6 ⁵ M	45,000	40,100	0.89
Hawthorne Blvd./Prairie Avenue	4-6 ⁵ M	45,000	41,600	0.92
Marine Avenue				
I-405/Inglewood Avenue	4S	24,000	30,000	1.25
Inglewood Avenue/Hawthorne Blvd.	4S	24,000	21,700	0.90
Hawthorne Blvd./Freeman Avenue	4S	24,000	22,600	0.94
Freeman Avenue/Prairie Avenue	4S	24,000	23,400	0.98
Manhattan Beach Boulevard				
Inglewood Avenue/I-405	4M	36,000	28,900	0.80
I-405/Hawthorne Blvd.	4M	36,000	28,600	0.79
Hawthorne Blvd./Prairie Avenue	4M	36,000	22,500	0.63
166th Street				
West of Hawthorne Blvd.	2LC	7,500 ⁶	3,000	0.40
Hawthorne Blvd./Freeman Avenue	2C	15,000 ⁶	3,200	0.21
Freeman Avenue/Prairie Avenue	2C	15,000 ⁶	2,500	0.17
Redondo Beach Boulevard				
Hawthorne Blvd./I-405	4M	36,000	25,100	0.70
I-405/Prairie Avenue	4M	36,000	23,000	0.64
Artesia Boulevard				
Inglewood Avenue/Firmona Avenue	4M	36,000	46,600	1.29
Firmona Avenue/Redondo Beach Blvd.	4M	36,000	48,300	1.34
170th Street	2LC	7,500	3,100	0.41
162nd Street	2LC	7,500	2,000	0.27
147th Street	2LC	7,500	9,700	0.36

- ¹ Denotes number of lanes: M = Major; S = Secondary; C = Collector; LC = Local Collector
- ² Theoretical LOS E Capacity from Table 5-2, *City of Lawndale Comprehensive Traffic Engineering Study*, BSI — June 1986
- ³ 1989-1990 Daily traffic Counts — See Appendix for actual count summaries
- ⁴ V/C = Volume to Capacity — based on LOS E daily capacity
- ⁵ Striped for six lanes with no stopping restrictions during peak hours.
- ⁶ LOS E capacity is estimated

Existing Major and Secondary Highway Operations

table 1

CITY OF LAWDALE GENERAL PLAN

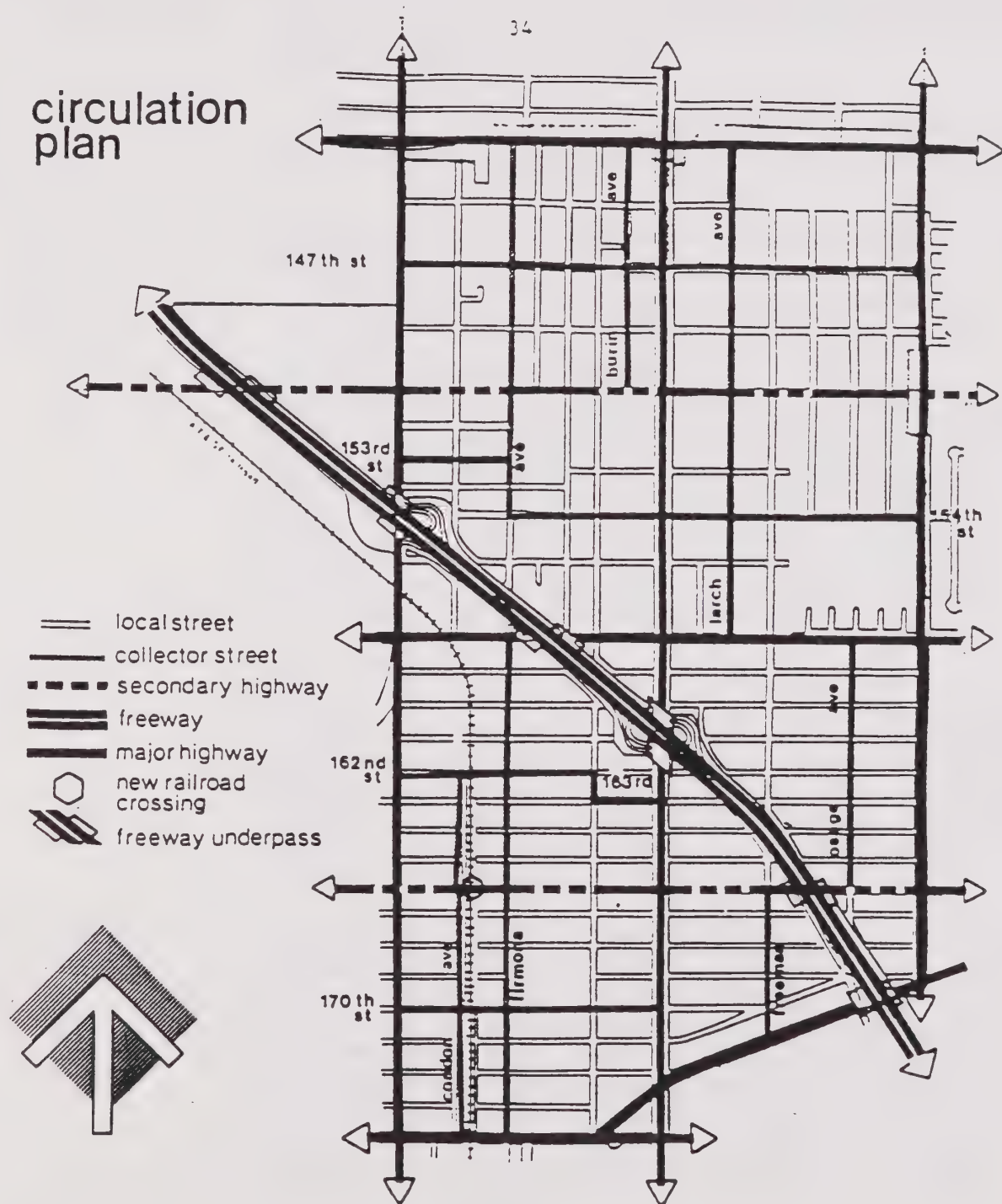


Note: Counts taken in October, 1990

Existing Daily Traffic Volumes

figure D

circulation plan



Existing Circulation Plan

figure E

One of the most significant shortcomings of the local circulation system in Lawndale is the narrow streets. Prior to incorporation of the City, subdivisions occurred at minimum standards. Narrow lots were created, as well as narrow streets. Today approximately 15 percent of the total street mileage in Lawndale has only 26 feet of pavement within a 40 foot right-of-way. This is too narrow if parking is allowed on both sides of the street. Parking on one side is, therefore, prohibited on 40 foot right-of-way streets, as well as on designated collector streets with less than 40 feet in pavement width.

The narrow streets occur in the most crucial locations, including industrial areas. To compound the problem, loading and unloading typically occur in the streets.

Although the City has a policy of 40 foot wide collector streets, this policy has not been implemented. If the designated collector streets have to function as such and thereby carry higher traffic volumes than the local streets, they must be widened in order to increase efficiency.

The existing AT&SF Rail Line has created a barrier to east/west traffic circulation in the southwest quadrant of the City. The residential area east of Inglewood and west of the tracks has inadequate circulation because the number of railroad crossings is limited. The only north/south street within the area is Condon Avenue. Currently Condon Avenue is 40' wide south of 170th Street. Moreover, effective circulation is further hampered by the one-way function of that street. In order to create an effective loop system to enhance circulation in that area Condon Avenue, must be widened to collector street standards.

Since the construction of the San Diego Freeway in 1963, east-west movement in the southern part of the City has been significantly restricted. The only street between Hawthorne Boulevard and Redondo Beach Boulevard provided with a freeway underpass is 166th Street although it terminates at the Santa Fe Railroad. While the construction of a railroad crossing at 166th Street will improve east-west travel, this may not be feasible at this time due to physical constraints which increases the construction cost of this improvement.

Peak Hour Considerations

Examining daily traffic volumes on arterial streets is one method of determining if a roadway segment is operating in an efficient manner. However, a more accurate method of determining the functional capacity is by defining the operational characteristics at signalized intersections during peak hour periods. Analyzing the peak hour periods is important because this is when the street network generally has the highest demand placed on it. Peak hour level of service at signalized intersections along Hawthorne Boulevard were obtained from a traffic study conducted by BSI and dated June 1986. The following table presents these peak hour level of service summaries. ...

Hawthorne Boulevard Intersection Capacity Summary			
Intersection Level of Services			
Intersection	AM Peak Hour	Mid Day Peak Hour	PM Peak Hour
Hawthorne Boulevard at:			
Redondo Beach Blvd.	E	D	D
169th Street	D	B	C
166th Street	C	B	C
S.D. Freeway S/B off ramp	D	C	E
S.D. Freeway N/B off ramp	C	B	E
Manhattan Beach Blvd.	E	D	E
154th Street	B	A	C
Marine Avenue	C	C	E
147th Street	D	A	C

Source: City of Lawndale Comprehensive Traffic Engineering Study (BSI, June 1986) Table S-3

As shown, it is evident that most major intersections along Hawthorne Boulevard operated at LOS E during the AM and PM peak hours in 1986. Since traffic volumes have increased in this corridor over the last four years, it is reasonable to assume current levels of service are at or below 1986 levels. The City of Lawndale should conduct a comprehensive peak hour evaluation at all signalized intersections within the City to determine where deficiencies exist and to identify opportunities to enhance capacity. New development or redevelopment should be required to perform traffic impact studies to determine the level of improvement appropriate to the street network associated with impacts by that development.

Parking

Lawndale has parking deficiencies stemming from substandard street widths, narrow residential lots, existing high residential densities and, therefore, high vehicular activity, in addition to inadequate off-street parking requirements.

In the residential areas the streets are overcrowded with parked cars in the evening hours. This is mainly due to the inadequate off-street parking requirements. Duplexes are only required to provide one and a half spaces per dwelling and sometimes boats or recreational vehicles are also present. Zoning has also, in the past, two single family units on one lot, frequently without adequate off-street parking. To compound this situation, some of the City streets are extremely narrow, necessitating parking restrictions. The many driveways, which are inherent to small lot subdivisions not served by alleys, further reduce the available parking on City streets in that the short distances between driveways significantly limit parking opportunities.

Insufficient commercial parking areas can be directly traced to the high density of small businesses present, especially on Hawthorne Boulevard. Many such establishments do a higher volume of business than their physical sizes would indicate, and since parking requirements are based on square footages, the parking needs are often not met. On Hawthorne Boulevard this is in part mitigated by the municipal parking available in

the center median, although businesses cannot consider this facility as part of the parking they must provide. The parking facilities in the median are not fully mitigated due to:

- Users must cross at least three heavily travelled lanes of Hawthorne Boulevard in order to gain access to business establishments.
- Crosswalks are provided only at the intersections.
- Because of the wide street, pedestrians are exposed to oncoming traffic for a longer time period when crossing.

In view of the above, the parking facility is under utilized. Many users park only near the intersections, leaving mid-block parking virtually vacant. Moreover, employees utilize the median more often than do customers.

It seems apparent that parking facilities adjacent to businesses would be better utilized and would increase pedestrian safety. Redesign of Hawthorne Boulevard as currently recommended in the General Plan (Hawthorne Boulevard Corridor Specific Plan) will provide significant improvements in the parking and traffic operations.

Public Transportation

Public transportation within the City of Lawndale is provided by the Southern California Rapid Transit District (SCRTD). SCRTD lines 40, 125, 126, 130, 210, 211, 215, 442, and 443 provide regional service throughout the Los Angeles metropolitan area. In addition, Lawndale is served by Gardena Municipal Bus Lines 1, 3, and 4 and also by Torrance Transit Lines 2, 5, and 8.

In the spring of 1990, a 19 mile trolley commenced operation between Long Beach and downtown Los Angeles. The blueline is the first leg of a proposed light-rail system covering more than 150 miles. This new light rail system will help partially mitigate heavy traffic congestion experienced on the regional freeway and arterial system in and around the City of Lawndale.

The City of Lawndale operates two public transportation services within the City limits. The first is referred to as the Lawndale Trolley. This is a fixed route bus that operates between 7:00 AM and 7:00 PM Monday through Friday (and weekends with shorter hours) and provides service to the east and west sides of Lawndale between Rosecrans Avenue and the Galleria Shopping Center in Redondo Beach. This service is free of charge to all Lawndale residents.

Also, the City provides a senior van (by appointment only) which provides senior citizens with door-to-door service on an as-needed basis. Reservations must be made with at least 24 hour advance notice. This service is also provided at no charge to Lawndale residents.

The City should work closely with SCRTD in encouraging public transportation patronage. This could include, but not be limited to:

- bus stop shelters
- concrete bus pads
- wide and well lighted sidewalks
- preferred parking areas for carpool and vanpools
- encourage employer subsidized mass-transit pass programs
- provision of centrally located information racks for distribution of van/carpool and bus information

Goals, and Policies

The overall goals of the circulation element are described as follows:

- Provide an integrated transportation system for the safe and efficient movement of people and goods with minimal disruption to the environment within and through the City of Lawndale.
- Consider all modes of transportation, including motor vehicle (Master Transportation Plan), mass transit (public and private bus, rail, and taxi systems), air transportation, and non-motorized transportation (pedestrian, and bicycle).
- Develop alternative transportation strategies designed to reduce traffic volumes and improve traffic flow in accordance with the Air Quality Management Plan Element.
- Participate in and assist with coordinating regional efforts which integrate the City's transportation system with the regional transportation system.

Goal 1: Integrated Transportation System

Provide for the transportation needs of the community and subregion by implementing a circulation system, which provides a high level of mobility, efficiency, access, safety, and environmental consideration for all modes and purposes of trips. These modes may include, but not be limited to automobiles, trucks, buses, bicycles, pedestrians, and rail. The intent of this section is to ensure that the improvement to existing facilities is coordinated with future population and employment growth and provides a balanced mix of transportation resources serving the community.

Policies

The City's circulation system does not stand on its own, but is an integral part of the overall land use planning for the City. It also must function as a component of the regional transportation system. The following policies are intended to direct City efforts to promote this integration of the circulation system with City-wide land use policies and the regional transportation system:

Policy 1a

The City's circulation plan shall be designed to provide the facilities and level of access necessary to serve the specific existing and proposed land uses proposed in the land use plan and regional travel needs.

Policy 1b

The City shall provide necessary facilities to obtain a balanced use of all travel modes to address the transportation needs of all ages and to provide mobility for a variety of trip purposes. The City shall generally recognize the following priorities for new transportation facilities, in descending order: vehicular, transit, pedestrian, bicycle where street ROW allows, and freight movement.

Goal 2: Master Transportation Plan

Provide a network of roadways throughout the City, which is the backbone of the transportation system. The street system is used for vehicular, bicycle, transit, pedestrian, and freight movement throughout the City. Thus, it is essential to define a hierarchical system in which each roadway functions in a manner consistent with its intended use.

Policies

The policies contained in this section are intended to encourage design standards which promote efficiency and safety of the circulation system.

Policy 2a

The City shall plan, design, and implement a street system that recognizes the importance of the use and function of each hierarchical street classification. These street classifications include major highway, secondary highway, collector street, and local street. The function of each is described below:

Major Highway — The main function of this classification is to provide regional, subregional, and intra-city travel services. Features include high design standards with six (or more) travel lanes, raised and landscape medians.

Secondary Highway — The secondary highway street system is designed for intra-city travel as opposed to providing direct access to abutting properties. Typical design features include provisions for four travel lanes without a raised median. Parking is generally permitted, except in areas where turn pockets or continuous center lanes are provided.

Collector Street — The collector street is designed to connect local streets with the adjacent arterial street system. Design standards include provision for two travel lanes and parking, except in specific locations where parking is removed to provide turn lanes at intersections.

Local Street — The local street is designed to provide access from neighborhoods to the collector street system. This classification should be discontinuous in alignment so through traffic is discouraged. Typical design standards include provisions for one travel lane in each direction, parking on both sides, and direct driveway access.

Policy 2b

The Circulation Plan (see Figure F) schematically shows the locations where different street classifications interface. Normally, the transition from one classification to another will occur in mid-block areas to preclude noncontinuing lanes at intersections. The design criteria (design speed, curve radii, etc.) for the higher classification shall generally take precedence through the transition area. The City Engineer shall review these transition areas and provide guidance in achieving this policy.

Policy 2c

The City shall set a goal for an acceptable traffic service standard during AM and PM peak periods at a LOS C for all arterial and street links

with corresponding standard of LOS D for all intersections. These service values are defined by the 1985 edition of the *Highway Capacity Manual* or any subsequent edition thereof. This policy shall acknowledge that the aforementioned LOS standards may not be attainable on some existing facilities where abutting development precludes acquisition of additional right-of-way needed for changes in facility classification.

Policy 2d

The City shall adopt design standards for all streets in accordance with their functional classifications and recognized design guidelines. In developing these guidelines, the City should consider Los Angeles County, Caltrans and American Association of State & Highway Transportation Officials (AASHTO) design standards.

Policy 2e

The City shall institute street access guidelines consistent with the street classifications. These shall be applied, where feasible, to all new development or redevelopment projects. The following guidelines shall be used to define appropriate access:

- The City shall prohibit driveway access to major highways.
- Access to secondary highways shall not be permitted unless there is no other reasonable means of access to the public street system. Where access to major or secondary highways must be allowed, it shall be limited through the use of medians and/or access controls to maintain street capacity.
- Access along secondary highways should be located with a desirable minimum of 100 feet from the ends of the curb returns.

Goal 3: Roadway Improvements

This section incorporates policies which will encourage the orderly development and funding of improvements to the street system. It is expected that the construction will be funded through a combination of developer exactions, fees, and City, State and Federal funds (gas tax, Proposition A sales tax, FAU, Fetsim, etc.).

Policies

Policy 3a

The City shall require or provide adequate traffic safety measures on all existing roadways. These measures may include, but not be limited to, appropriate levels of maintenance, proper street design, traffic control devices (signs, signals, and striping), street lighting, and coordination with the school districts to provide school crossing signs and protection.

Policy 3b

The City should consider giving priority to funding and implementing projects which relieve existing deficiencies.

Policy 3c

The City shall, where feasible, interconnect traffic signals to form area networks or corridor systems. These systems shall be timed to facilitate the flow of through traffic on the arterial system, thus enhancing the movement of vehicles and goods through the City, while reducing fuel consumption and air pollution.

Policy 3d

The City shall approve and build streets as per adopted City standards.

Policy 3e

A capital improvement program (CIP) shall establish priorities for major public expenditures. This program should identify areas of greatest public need, be coordinated with all short and long range planning, demand the most efficient utilization of the tax dollar and always be in balance with the City's financial resources.

Policy 3f

Place identifying emblems, gateways or monuments at critical boundary locations and in particular upon existing Hawthorne Boulevard (further detailed in the Hawthorne Boulevard Corridor Specific Plan).

Policy 3g

Encourage utility companies and agencies to improve and beautify their facilities and placing utilities underground as quickly as possible.

Policy 3h

Replant/replace or introduce new landscaping along all new roadways or those which have been redesigned/reconstructed, to preserve the visual aesthetics of the roadway.

Policy 3i

Analyze, upgrade and enforce parking standards relating to residential developments with the approval of the Planning Commission, City Council and City staff including:

- Parking space size and access
- Convenience of parking to the units
- Number of spaces per unit
- Parking for commercial vehicles
- Parking for recreational vehicles

Goal 4: Transportation
Demand Management

The transportation system envisioned for the City is a balanced system, incorporating the needs of all age groups, as well as provisions for many different modes of transportation. To accomplish this, it is necessary to implement policies encouraging a range of transportation opportunities while reducing the dependence upon automobiles.

Policies

Policy 4a

The City shall encourage the reduction of the total number of daily and peak hour vehicle trips and provide better utilization of the circulation system through development and implementation of overall Transportation Demand Management (TDM) and Transportation System Management (TSM) programs. These may include implementation of mandatory peak hour trip reduction requirements, requirements for staggered work hours, increases in development of employment centers where transit usage is highly viable, encouragement of ride sharing in the public and private sector, provision for park-and-ride facilities adjacent to the regional transportation system, and provisions for transit subsidies.

The City shall assist employers to work with Caltrans rideshare branch (Commuter Computer) where there are existing or planned employment centers.

Policy 4b

The City shall consider the use of bicycle lanes where feasible during the design and improvement of the street system.

Policy 4c

The City shall update and maintain a bikeway plan with recommended routes for bicyclist to use. These routes shall connect residential areas with schools, parks, recreation areas, major employment centers, and neighborhood commercial areas.

Policy 4d

The City shall generally require pedestrian facilities along all streets.

Policy 4e

The City shall require that adequate off-street parking be provided for all properties.

Policy 4f

The City shall maintain curb use priorities that consider, in descending order, the needs of through traffic, transit stops, bus turnouts, passenger loading needs, and short and long term parking.

Policy 4g

The City shall discourage the use of public streets for freight loading and unloading.

Goal 5: Public Transit and Railway Transit

Promote public transit and railway transit development and usage. An integral part of the multi-modal system is the provision for public transit and rail service. For transit and rail service to be successful, they should be properly planned so that they are accessible to users and operate in a timely fashion. The following policies are intended to provide guidance in establishing a transit system and encouraging usage of railroad facilities to serve the needs of the City and region.

Policies

Policy 5a

The City shall cooperate with Caltrans and the Los Angeles County Transportation Commission (LACTC) to attain a balance of transportation opportunities. This shall include the establishment of criteria to implement transit improvements, short/long range transit service plans, corridor improvements, transit centers, park and ride lots with amenities for bicyclist, and the preservation of rights-of-way for commuter rail stations.

Policy 5b

The City shall require developers to construct, when appropriate, transit facilities, including bus turn-outs where feasible on arterials and bus stop amenities, including lighted shelters/benches, telephones, and route information sign holders.

Policy 5c

The City should work with the Southern California Rapid Transit District (SCRTD) to establish transit stops adjacent to senior housing programs, areas with high concentrations of medical facilities, and major employment centers, as well as retail and commercial areas.

Policy 5d

The City should continue to work with the SCRTD, Caltrans, and LACTC to plan and implement a commuter rail system. This shall include the appropriate location routes of stops, service schedules, feeder bus routes, parking needs, a transit terminal/park and ride lot, and funding.

Policy 5e

The City shall work with the SCRTD to assure that transit centers and major stops have adequate bicycle and pedestrian access, including secure bicycle storage, where appropriate. The City shall encourage more bus services which accommodate bicycles, where appropriate.

Policy 5f

The City, in coordination with the SCRTD, shall encourage the implementation and utilization of a multi-modal transit center by coordinating bus routes and requiring, when applicable, shuttle services to major employment centers.

Policy 5g

The City shall encourage additional passenger usage of railroad service by providing safe and adequate parking facilities with shuttle service if appropriate, enhanced landscaping, and adjacent recreational areas. Ancillary services, such as cafes, postal services, and small shops, should be considered for development around the station.

Goal 6: Nonmotorized Transportation

Enhance environmental and social benefits for the citizens of Lawndale by providing an integrated system of bicycle and pedestrian networks with associated facilities for the safe and efficient movement of people in and through the City of Lawndale.

Policies

Policy 6a

The City shall provide bikeways (as defined by Caltrans) throughout the City to encourage bicycle usage in place of the automobile.

Policy 6b

The City shall provide properly designed pedestrian facilities for the handicapped and elderly population to assure their safety and enhance mobility.

Goal 7: Bicycle Facilities

Provide an integrated circulation system and bicycle facilities to promote the environmental and social benefits of commuter and recreational bicycling. The bicycle circulation system and bicycle facilities shall provide mobility and safety to all persons and areas within the City of Lawndale.

Policies

Policy 7a

Class II Bikeways (on-street bike lanes) shall be planned into all major, highways.

Policy 7b

Collector streets, which are identified to function as links for the bicycle circulation system, should be provided with Class II Bikeways (bike lanes). In such cases, the City shall accommodate cyclists on these identified streets by widening the street or eliminating on-street parking wherever possible.

Policy 7c

The use of land shall integrate the bicycle circulation system with auto, pedestrian, and transit systems.

- Development shall provide short-term bicycle parking and long term bicycle storage facilities, such as bicycle racks, pedestal posts, and rental bicycle lockers. Provision of bicycle storage facilities shall apply to median and high density residential developments as well.
- Development shall provide safe and convenient bicycle access to high activity land uses, such as schools; parks; and shopping, employment, and entertainment centers.

Policy 7d

The City shall continue seeking funds at the private, local, and federal levels for bicycle circulation system expansion.

Goal 8: Pedestrian Facilities - Provide for safe pedestrian circulation throughout the City, including sidewalks, pedestrian malls, and trails.

Policies

Policy 8a

The construction of a minimum of 5-foot wide sidewalk shall be required in all new developments and street improvements.

Policy 8b

The City shall encourage the inclusion of common open space for pedestrian use within residential development areas.

Policy 8c

The City shall, in accordance with state law, provide access for the handicapped and elderly to all streets by providing handicapped ramps at the intersections.

Implementation Programs

1. Integrated Transportation System

1.1 System Management

Adoption and implementation of comprehensive citywide TSM and TDM programs to reduce peak hour traffic volumes to a level which can be accommodated by the street system.

1.2 Transit Coordination

Work closely with Caltrans, LACTC in the planning and implementation of the proposed light rail line (Green Line) and the proposed train station along 166th Street.

2. Master Transportation Plan

2.1 Travel Forecast

In order to assess the long range impacts of General Plan land uses on the proposed Circulation Element, computerized traffic forecasts were performed to estimate future traffic volumes along city streets. The forecasted annual daily traffic for street segments were evaluated and compared with acceptable standards to determine buildout impacts.

For purposes of this analysis, a table has been prepared to compare daily traffic volumes to capacities. This is a general approach which can be used to identify potential capacity constraints. Where this potential exists, a more detailed peak hour analysis should be performed. The attached Table 2 depicts the trip generation for the proposed land uses. Table 3 shows the General Plan buildout, Average Daily Trips (ADT), and street segment volume to capacity (V/C) ratio.

2.2 Traffic Analysis

The results of the analysis indicate that all circulation element streets within the City of Lawndale, with the exception of Manhattan Beach Boulevard, 166th Street, and Redondo Beach Boulevard, will operate under congested conditions with the demand volume exceeding the capacity of the roadways. This is due to the proposed increase in residential intensity (an additional 4,600 units), and commercial land use (an additional 70 acres). The additional traffic to be generated by the increased development potential, combined with the existing traffic within the City, would significantly impact the traffic operation along the circulation streets within the City of Lawndale.

2.3 Traffic Impacts

To mitigate the traffic impact on the circulation roadways, several facilities will require reclassification from the current Circulation Element as shown on Table 4 and Figure F to improve the traffic operation. The additional lanes could be provided through parking restrictions, restriping, widening via reduction in sidewalk width, or widening through the purchase of right-of-way.

A second type of improvement which could increase the roadway capacities would be to reduce the side friction caused by parking

maneuvers, entering and exiting traffic, and bus stops. This can be accomplished by eliminating or reducing on street parking, consolidation of driveways, addition of bus turnouts where feasible, and provision of raised medians to separate opposing flows of traffic. Capacity can also be maximized on a street network by proper signal timing and coordination of adjacent traffic signals. It should be noted that, in certain areas of the city, parking demand exceeds existing supply. A detailed investigation of the parking situation along these streets should be further investigated and consideration should be given to the provision of off-street parking lots.

A specific plan is being developed for Hawthorne Boulevard within the city limits. This plan calls for the relocation of the existing parking in the median to the outer edges. Three through lanes in each direction separated by a raised median are also proposed. A raised median will separate the parking areas from the travel lanes and one-way frontage roads serving these areas will be provided on both sides of Hawthorne Boulevard. Bus turnouts and enhanced intersection geometrics are also proposed. In addition, Caltrans is currently contemplating transferring jurisdiction of Hawthorne Boulevard from the 405 freeway south to the city limit. The City should coordinate closely with Caltrans to upgrade this roadway in order to minimize future maintenance and improvement obligations.

Additionally, in order to reduce the traffic demand on the City's circulation network, the City should coordinate closely with Southern California Rapid Transit District (SCRTD) and Los Angeles County Transportation Commission (LACTC) to increase and improve the transit service within the City. Additional routes should be planned throughout the City and the frequency of bus service should be increased. The City should also work closely with all agencies to plan and implement the light rail service and the transit station proposed to parallel the San Diego Freeway along the south side.

Another measure which would decrease the traffic demand would be the adoption and implementation of Transportation System Management (TSM) and Transportation Demand Management (TDM) programs.

In summary, significant adverse transportation impacts to the City of Lawndale's street network can be reduced with the implementation of the proposed Circulation Network as shown in Table 4 and Figure F.

Trip Generation Summary for Buildout Conditions¹

Land Use	Daily Trip Rate	Existing Intensity	Project Plan Intensity	Existing VPD	Project Plan VPD
RESIDENTIAL					
SF Low 0-8.9	10 VPD/DU	1,825 DU	62 DU	18,250	620
SF Med 8.9-17.6	10 VPD/DU	500 DU	810 DU	5,000	8,100
MF Low 8.9-17.6	8 VPD/DU	3,500 DU	7,163du	28,000	57,304
MF Med 17.6-33	8 VPD/DU	2,230 DU	3,828du	17,840	30,624
Subtotal		8,055 DU	11,863du	69,090	96,648
COMMERCIAL					
General	400 VPD/AC	106.6 AC	150 AC	42,640	60,000
Specialty ²	490 VPD/AC	0 AC	0 AC	0	0
Commercial	520 VPD/AC	0 AC	35 AC	0	18,200
Subtotal		106.6 AC	178.0 AC	42,640	78,200
INDUSTRIAL	51.8 VPD/AC	13.8 AC	16.4 AC	715	850
PUBLIC FACILITY/SCHOOL	50 VPD/AC	141.6 AC	112 AC	7,080	5,600
OPEN SPACE	0 VPD/AC	15.5 AC	19 AC	0	0
VACANT	0 VPD/AC	10.9 AC	0 AC	0	0
STREET/ALLEY	0 VPD/AC	327.7 AC	327.7 AC	0	0
TOTAL				133,737	181,298

¹ Source: ITE Trip Generation Manual, 4th Edition

² Based on land use density of 12,000 SF GLA per acre and trip rate of 40.675 VPD per 1,000 square feet GLA.

³ Based on land use density of 12,000 SF GLA per acre and trip rate of 43.0 VPD per 1,000 feet GLA.

VPD: Vehicle Per Day

SF: Single Family

MF: Multi-Family

DU: Dwelling Unit

Trip Generation Summary for Buildout Conditions

Table 2

CITY OF LAWNDAL GENERAL PLAN

Buildout Major and Secondary Highway Operations				
Street Segment	Class ¹	LOS E Daily Capacity ²	Buildout	
			ADT ³	V/C ⁴
HAWTHORNE BOULEVARD				
Rosecrans Ave/147th St	6M	54,000	61,950	1.15
147th St/Marine Avenue	6M	54,000	58,410	1.08
Marine Avenue/154th St	6M	54,000	52,847	0.98
154th St/Manhattan Beach Blvd	6M	54,000	60,938	1.13
Manhattan Beach Blvd/I-405	6M	54,000	66,248	1.23
I-405/166th St	6M	72,000	73,960	1.03
166th St/170th St	6M	54,000	72,570	1.34
170th St/Redondo Beach Blvd	6M	54,000	69,535	1.29
INGLEWOOD AVENUE				
Rosecrans Ave/Marine Avenue	4M	36,000	32,343	0.90
Marine Avenue/154th St	4M	36,000	47,453	1.32
I-405/Manhattan Beach Blvd	4M	36,000	62,688	1.74
Manhattan Beach Blvd/162nd St	4M	36,000	50,450	1.40
162nd St/Artesia Blvd	4M	36,000	43,831	1.22
PRAIRIE AVENUE				
Rosecrans Ave/Marine Avenue	4M	36,000	46,041	1.28
Marine Avenue/154th St	4M	36,000	39,356	1.09
154th St/Manhattan Beach Blvd	4M	36,000	44,653	1.24
Manhattan Beach Blvd/161st St	4M	36,000	39,608	1.10
161st St/166th St	4M	36,000	43,518	1.21
166th St/Redondo Beach Blvd	4M	36,000	44,401	1.23
ROSECRANS AVENUE				
Inglewood Ave/Firmona Ave	4-6M	45,000	44,627	0.99
Firmona Ave/Hawthorne Blvd	4-6M	45,000	43,331	0.96
Hawthorne Blvd/Prairie Ave	4-6M	45,000	44,951	1.00
MARINE AVENUE				
I-405/Inglewood Ave	4S	24,000	31,771	1.32
Inglewood Ave/Hawthorne Blvd	4S	24,000	22,981	0.96
Hawthorne Blvd/Freeman Ave	4S	24,000	23,440	1.00
Freeman Ave/Prairie Ave	4S	24,000	24,270	1.03
MANHATTAN BEACH BOULEVARD				
Inglewood Ave/I-405	4M	36,000	32,302	0.90
I-405/Hawthorne Blvd	4M	36,000	31,967	0.89
Hawthorne Blvd/Prairie Ave	4M	36,000	25,149	0.70
166TH STREET				
West of Hawthorne Blvd	2LC	7,500	4,602	0.62
Hawthorne Blvd/Freeman Ave	2C	15,000	4,339	0.29
Freeman Ave/Prairie Ave	2C	15,000	3,390	0.23
REDONDO BEACH BOULEVARD				
Hawthorne Blvd/I-405	4M	36,000	26,863	0.75
I-405/Prairie Ave	4M	36,000	24,615	0.68
ARTESIA BOULEVARD				
Inglewood Ave/Firmona Ave	4M	36,000	49,873	1.39
Firmona Ave/Redondo Beach Blvd	4M	36,000	51,692	1.44

¹ Denotes number of lanes: M = Major; S = Secondary; C = Collector; LC = Local Collector

² Theoretical LOS E Capacity from Table 5-2, *City of Lawndale Comprehensive Traffic Engineering Study*, BSI — June 1986

³ 1989-1990 Daily traffic Counts — See Appendix for actual count summaries

⁴ V/C = Volume to Capacity — based on LOS E daily capacity

Buildout Major and Secondary Highway Operations

table 3

CITY OF LAWDALE GENERAL PLAN

Buildout Highway Operations with Proposed Street Improvement				
Street Segment	Class ¹	LOS E Daily Capacity ²	Buildout (with proposed improvement)	
			ADT ³	V/C ⁴
HAWTHORNE BOULEVARD				
Rosecrans Ave/147th St	8M	72,000	61,950	0.86
147th St/Marine Avenue	8M	72,000	58,410	0.81
Marine Avenue/154th St	8M	72,000	52,847	0.73
154th St/Manhattan Beach Blvd	8M	72,000	60,938	0.85
Manhattan Beach Blvd/I-405	8M	72,000	66,248	0.92
I-405/166th St	8M	72,000	73,960	1.03
166th St/170th St	8M	72,000	72,570	1.01
170th St/Redondo Beach Blvd	8M	72,000	69,535	0.97
INGLEWOOD AVENUE				
Rosecrans Ave/Marine Avenue	6M	54,000	32,343	0.60
Marine Avenue/154th St	6M	54,000	47,453	0.88
I-405/Manhattan Beach Blvd	8M	72,000	62,688	0.87
Manhattan Beach Blvd/162nd St	6M	54,000	50,450	0.93
162nd St/Artesia Blvd	6M	54,000	43,831	0.81
PRAIRIE AVENUE				
Rosecrans Ave/Marine Avenue	6M	54,000	46,041	0.85
Marine Avenue/154th St	6M	54,000	39,356	0.73
154th St/Manhattan Beach Blvd	6M	54,000	44,653	0.83
Manhattan Beach Blvd/161st St	6M	54,000	39,608	0.73
161st St/166th St	6M	54,000	43,518	0.81
166th St/Redondo Beach Blvd	6M	54,000	44,401	0.82
ROSECRANS AVENUE				
Inglewood Ave/Firmona Ave	6M	45,000	44,627	0.99
Firmona Ave/Hawthorne Blvd	6M	45,000	43,331	0.96
Hawthorne Blvd/Prairie Ave	6M	45,000	44,951	1.00
MARINE AVENUE				
I-405/Inglewood Ave	4M	36,000	31,771	0.88
Inglewood Ave/Hawthorne Blvd	4M	36,000	22,981	0.64
Hawthorne Blvd/Freeman Ave	4M	36,000	23,934	0.66
Freeman Ave/Prairie Ave	4M	36,000	24,781	0.69
MANHATTAN BEACH BOULEVARD				
Inglewood Ave/I-405	4M	36,000	32,302	0.81
I-405/Hawthorne Blvd	4M	36,000	31,967	0.89
Hawthorne Blvd/Prairie Ave	4M	36,000	25,149	0.70
166TH STREET				
West of Hawthorne Blvd	2LC	7,500	4,602	0.62
Hawthorne Blvd/Freeman Ave	2C	15,000	4,339	0.29
Freeman Ave/Prairie Ave	2C	15,000	3,390	0.23
REDONDO BEACH BOULEVARD				
Hawthorne Blvd/I-405	4M	36,000	26,863	0.75
I-405/Prairie Ave	4M	36,000	24,615	0.68
ARTESIA BOULEVARD				
Inglewood Ave/Firmona Ave	6M	54,000	49,873	0.92
Firmona Ave/Redondo Beach Blvd	6M	54,000	51,692	0.96

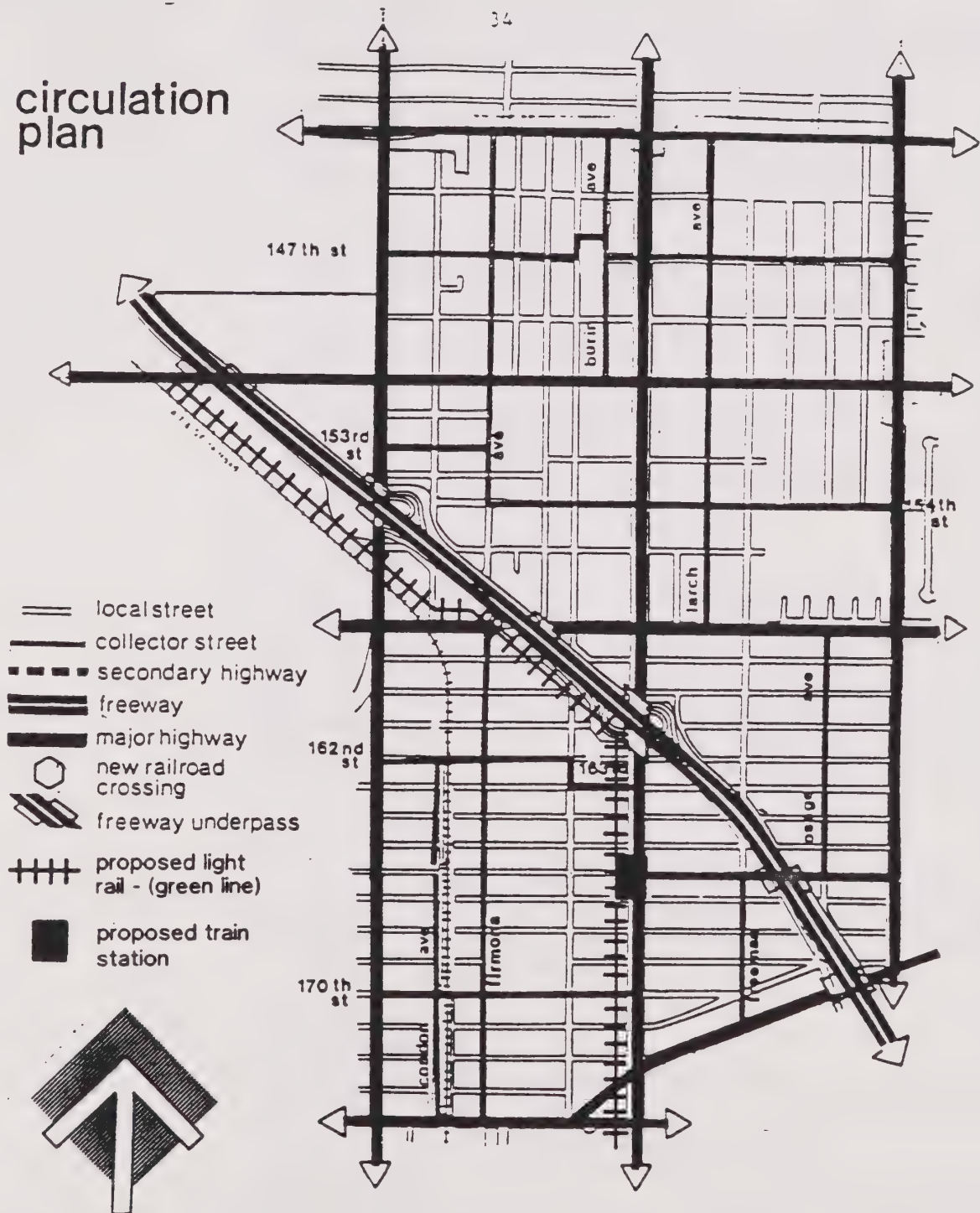
1
2
3
4

Denotes number of lanes: M = Major; S = Secondary; C = Collector; LC = Local Collector
Theoretical LOS E Capacity from Table 5-2, *City of Lawndale Comprehensive Traffic Engineering Study*, BSI — June 1986
1989-1990 Daily traffic Counts — See Appendix for actual count summaries
V/C = Volume to Capacity — based on LOS E daily capacity

Buildout Highway Operations with Proposed Street Improvement

table 4

circulation plan



Proposed Circulation Plan

figure F

3. Roadway Improvements**3.1 Circulation Network**

Implementation of the proposed circulation network and street classification standards as shown in Table 4.

3.2 Specific Plans

As more precise intersection data becomes available, special design treatments such as the Hawthorne Boulevard specific plan should be considered for mitigating potentially unacceptable levels of service.

3.3 Roadway Segment Improvement

Construct road segment improvements and road expansions at such time as traffic flow warrants improvement or expansion.

3.4 Intersection Improvement

Conduct a citywide traffic study by December 1992, to determine specific intersection improvements. Widen approaches and make any other necessary intersection improvements for those intersections operating at level of service E or F.

3.5 Congestion Management

Initiate efforts to develop a congestion management program, which will limit development unless an acceptable level of service is achieved, soon to be mandated by LACTC.

3.6 Development Mitigation

Require new developments to conduct traffic impact studies and to construct, as a condition of approval, all feasible roadway and intersection improvements warranted by the new development. These studies shall be reviewed by the City Engineer or his designated representative. For development that will increase the traffic demand along SR 107 (Hawthorne Boulevard), SR 91 (Artesia Boulevard), and I-405 (San Diego Freeway), traffic studies shall be submitted to Caltrans District 7 for approval.

3.7 Noise Abatement

The City should incorporate the following mitigation measures, where appropriate, into the design of improved roadways and streets, to ensure that new roadways will not result in future noise levels exceeding City land use compatibility criterion.

- Roadway barrier
- Lateral separation
- Retrofitting existing sensitive uses with added wall insulation, double pane windows, and air conditioning
- Relocation of severely impacted sensitive uses

3.8 Buffer Zones

Establish "buffer zones" with adequate setbacks to be incorporated into new development to avoid potentially unhealthful exposure to roadway noise and air quality levels. Such setbacks should be based on the maximum traffic volumes projected in this document.

3.9 Environmental

Every reasonable effort will be made to integrate and preserve significant natural features of the land, such as native vegetation, trees, etc.

3.10 Utilities

Utilities should be undergrounded or relocated whenever possible, in conjunction with roadway construction.

3.11 Landscaping

Landscaping is to be replanted/replaced or introduced along all roadways which have been redesigned or reconstructed.

3.12 Truck Routes

Designate specific routes for truck traffic and provide appropriate signage and enforcement.

4. Transportation Demand Management**4.1 Peak Hour Trip Reduction**

Adopt and implement comprehensive citywide TSM and TDM management programs to reduce peak hour traffic volumes to a level that can be accommodated by the street system.

4.2 Information Signage

Install directional/information signage on main streets indicating the location of public parking lots and the transit terminal to avoid having motorists drive around in search of these facilities.

4.3 Bicycle Route Maps

Assist employers in an effort to pool resources and ultimately reduce employee trips. An immediate task would be to develop and distribute a commuter bicycle route map.

4.4 Employee Shuttle Service

Encourage employers and new developers to provide shuttle service in heavily congested areas where street widening may not be feasible.

4.5 Staggered Work Hours

Encourage employers to use staggered work hours.

4.6 Parking Management

Monitor the land use intensities and initiate a parking management plan as necessary.

4.7 Transportation System Management

Continue to employ transportation system management strategies such as elimination of on-street parking where warranted, traffic signal synchronization, left turn lane pockets, lane restriping, one-way couplets, and manual traffic signal operations during peak hours.

4.8 Truck Traffic

Restrict truck pick-up and delivery to off-peak hours to improve traffic flow during peak hours.

**5. Public & Railway
Transit****5.1 Light Rail**

Continue to work closely with LACTC in planning and implementation of the proposed light rail project (Green Line). Ensure that all stations possible will have bicycle storage facilities, park-and-ride lots, and other transit and pedestrian amenities.

5.2 Bus Service

Work with SCRTD to monitor transit service improvements and identify additional bus lines which could carry bicycles; follow-up with implementation.

5.3 Development

All significant development generating over 500 daily trips should have transit facilities built in, such as bus turn outs, shelters, and bicycle storage facilities.

**6. Non Motorized
Transportation****6.1 Bicycle/Pedestrian/Transit Maps**

Develop a map depicting bicycle and pedestrian trails for the general public. Distribute the trails map and the regional transit map to all existing and future residents.

7. Bicycle Facilities**7.1 Bikeways Master Plan**

Conduct a citywide bikeway study by December 1992, to determine the location and feasibility of implementing a bikeway system. Develop a master plan for bikeways.

(See Section 5 & 6 previously)

8. Pedestrian Facilities

(See Section 5 & 6 previously)

HOUSING ELEMENT

II. COMMUNITY DEVELOPMENT

4. Housing Element

Introduction

Overview

This element updates housing goals and policies approved by the City of Lawndale in 1976 and 1984. There are currently several housing assistance programs in place, which are being administered by City and County agencies. This update will evaluate these existing programs, make recommendations regarding their continued use, as well as recommendations for additional programs that will allow the City to meet their State mandated housing goals. The responsibility for implementing the housing goals, policies and implementation programs is assigned to the City's Community Development Department.

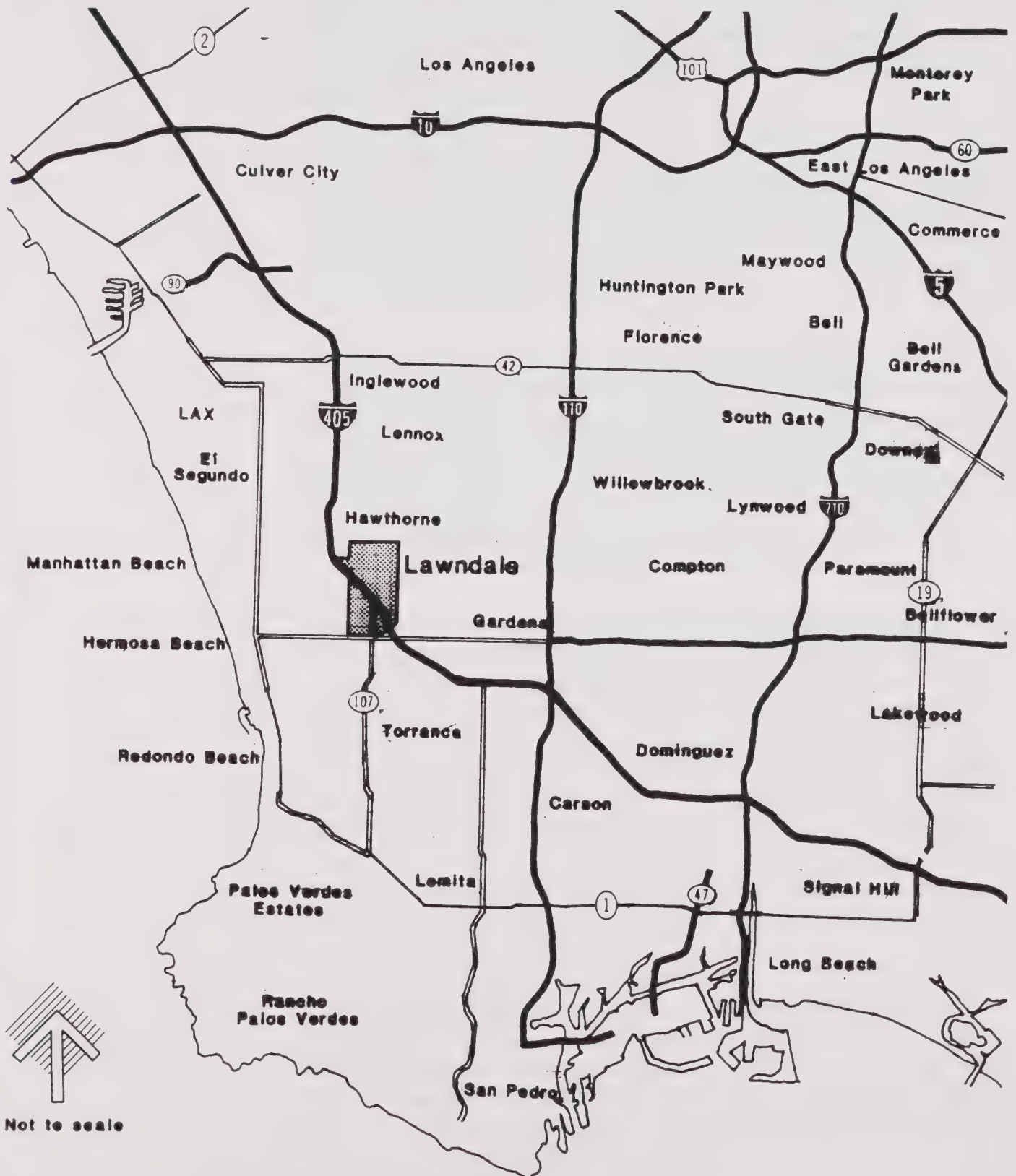
The City of Lawndale is located in the Los Angeles basin's urbanized south bay area as shown in Figure A. Adjacent incorporated areas include: The City of Hawthorne to the north; the City of Redondo Beach to the west and; the City of Torrance to the south. The Los Angeles County unincorporated area adjacent to the north of Lawndale is also considered urbanized. The City of Lawndale is a member of the Southern California Association of Governments (SCAG), a regional planning and administrative agency. The most recent Regional Housing Needs Assessment (RHNA) for SCAG members was completed in 1988. RHNA figures have been incorporated into this element to demonstrate Lawndale's housing needs in relation to those of the surrounding region.

Authority

Government Code Section 65580 states that the housing element shall: identify and assess existing and projected need; provide a statement of goals, policies, and quantified objectives; schedule programs for the preservation, improvement and development of housing; and make adequate provisions for the projected needs of all economic segments of the community.

Specific housing needs assessments are called for in Government Code Section 65583(a). The eight areas of assessment identified in the section are: Population and employment trends with documentation

CITY OF LAWDALE GENERAL PLAN



Regional Map

figure A

- of existing and projected housing needs; household characteristics; residentially developable land inventory; potential and actual governmental and non-governmental constraints; special housing needs; energy conservation opportunities and; potential changes to assisted housing inventories.

Another State law requirement for the Housing Element is to develop statements of community goals and policies. The Lawndale Housing Element has Goals and Policies categorized into the following six areas: Housing Opportunities; Housing Supply; Affordability; Preservation and Infrastructure; Cooperation/Coordination and; Energy and Resource Conservation.

Government Code Section 65583(c) calls for identifying a five year schedule of housing programs the City intends to implement in order to achieve the goals and policies set forth in the Element. These programs can include: Utilizing appropriate State and Federal financing subsidies; provision of regulatory concessions and incentives; administration of land use controls and; establishment of local housing funds. Implementation programs for the housing element fall into the same six categories used to identify goals and policies.

In addition to the above referenced Government Code Sections, the United States and the State of California courts have rendered decisions that provide specific interpretations to housing law. While not an exhaustive list, among the most notable decisions are: Pardee Construction Company vs. City of Camarillo (1984) which recognized and protected the citizen's power of initiative in cases where housing elements are reviewed for consistency with the General Plan; Buena Vista Garden Apartment Association vs. City of San Diego Planning Department (1985) which found that a city's Housing Element must substantially comply with State law; and, Associated Home Builders Inc., etc. vs. City of Livermore (1976) which put housing issues into a regional context.

State law pertaining to housing is probably the most extensive and detailed, compared to all other General Plan Elements. The Housing Element, however, does not supersede the other Elements of this General Plan, as it must be consistent with all other Elements. Due to the nature of the Housing Element, it is most closely related to the Land Use and Circulation Elements.

Legal requirements of the Housing Element can be found in Chapter 10.6 of the Government Code. They have been enacted to implement

State policies which declare the attainment of housing for every California family to be of utmost importance.

Because of the Housing Element's importance to the welfare of the citizens of Lawndale, the City conducted numerous public participation workshops and periodically reported Housing Element status to the advisory and legislative bodies. A community General Plan Review Committee (GPRC), consisting of City Council appointed citizens and local interest group representatives, was involved throughout the Element's preparation. All meetings and workshops were noticed to the public through newspapers, fliers, bulletin boards and other public means.

Organization

The Housing Element for the City of Lawndale provides the following information: An assessment of the housing needs of all economic segments of the resident population; Housing Goals and Policies which direct City activities towards providing for identified housing needs and; a recommended set of implementation programs that will carry out housing policies for the next five years.

Housing Needs Assessment

The housing needs assessment addresses the City's current and future housing needs through an inventory of existing conditions as well as information obtained from:

- 1990 U.S. Census
- Southern California Association of Governments (SCAG)
- Los Angeles County Statistical Data Department
- City of Lawndale Community Development Department
- other resources as documented.

Table I is a summary of the most current housing statistics for the City of Lawndale.

Table 1
1990 Housing Statistics Summary

Census Characteristic	Data
City Population ¹	27,331
Total Household Units ¹	9,778
Total Occupied Household Units ¹	9,227
Average Persons Per Household ¹	2.96
Median Income ²	\$33,714
Owner/Renter Household Percentages ¹	31.4/68.6
Total Number of Families ¹	6,200
Average Persons Per Family	3.48
No. of New Units Constructed (1980 - 1990) ³	1,764

Source:

¹1990 U.S. Census

²1988 Southern California Association of Governments

³Los Angeles County Statistical Data Department

Review of 1984 Housing Element

The Lawndale Housing Element was last updated in 1984. The 1984 Element identified twenty-one (21) implementation programs intended to meet the City's housing needs. Table 2 shows the effectiveness of the programs in terms of how the scheduled units were either achieved or not achieved.

Table 2
1984 Program Effectiveness

<u>Program</u>	<u>(Scheduled/Achieved/%Achieved)</u>
1. Home Improvement Rebates	(155/57/36.8)
2. Below Market Interest Rate Loans	(80/20/25.0)
3. Grants	(60/11/18.3)
4. Handyworker	(235/154/65.5)
5. Weatherization	(160/0/0.0)
6a. Section 8 Low Income Rent Subsidy	(175/95/54.9)
6b. Section 8 Moderate Income Rehabilitation	(50/7/14.0)
7. Landlord/Tenant Relations & Discrimination ¹	(375/119/31.7)
8. Collection of Data	(ongoing/Yes/NA)
9. Internship Program	(7-1-84/NO/0)
10. Voluntary Inclusionary Zoning ²	(1-1-85/NA/0)
11. Solicitation of Developers and Incentives	(1-1-85/NA/NA)
12. Building Code, Zoning Ordinance & Subdivision Ordinance Review and Revision	(ongoing/Yes/NA)
13. Improved Inter-governmental Communication	(ongoing/Yes/NA)
14. Manufactured Housing	(ongoing/NA/NA)
15. Property Maintenance Ordinance	(ongoing/NA/NA)
16. Feasibility Studies	(1984-1985/Yes/NA)
17. Capital Improvements ³	(1984/Yes/NA)
18. Trailer Park Continued Existence	(7-1-84/NA/NA)
19. Self Help Housing Rehabilitation	(1,000/0/0.0)
20. Century Freeway Replenishment Housing	(75/12/16.0)
21. Caltrans Excess Lands Housing	(60/0/0)
Total	(1135/475/41.8)

¹The County of Los Angeles has contracted with the Westside Fair Housing Council to handle landlord/tenant conflicts and discrimination issues. As of 1991, the Westside Fair Housing Council only handles discrimination cases. These numbers are for 1990 only.

²Element identified inclusionary zoning strategies, such as land banking, reduced parking requirements for senior housing and waiving development fees were not accomplished.

³Although the City maintains a capital improvements program, the City does not have a Community Facilities Element, as called for in this program.

Source: City of Lawndale, County of Los Angeles Department of Social Services

As can be seen in the table, Lawndale has not achieved all of their scheduled units utilizing the implementation programs outlined in the 1984 Housing Element.

The City will continue to utilize Section 8 programs as well as housing improvement rebates and loans. Other programs that were not successful have been reviewed for appropriateness and deleted if determined to be ineffective. This Housing Element will further define programs and incorporate those which are anticipated to ensure greater success during the planning period.

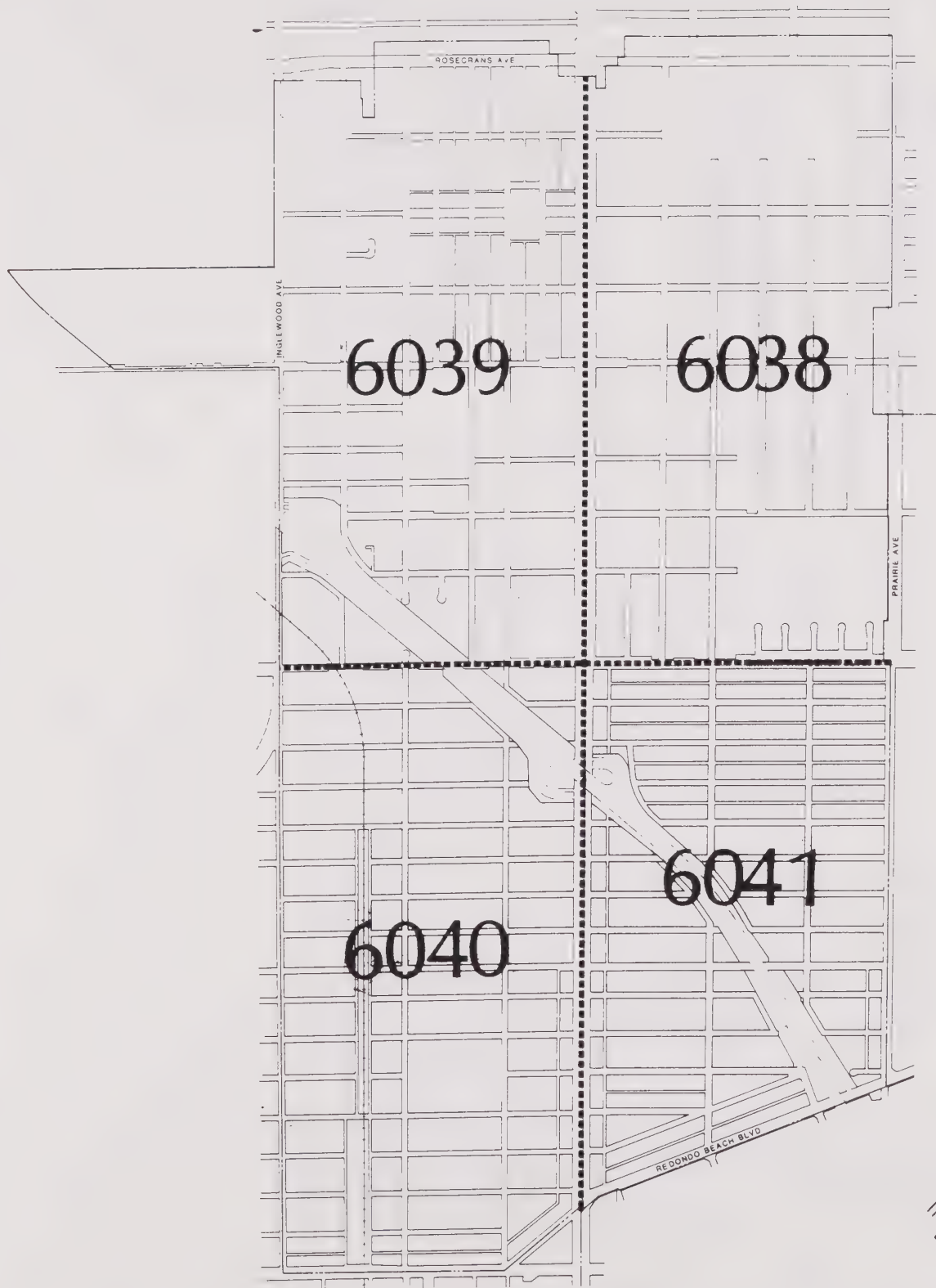
Population Characteristics

Information pertaining to current and past population and housing characteristics was collected from data on file with the U.S. Census Department, the Southern California Association of Governments, and a land use inventory conducted as part of the General Plan Update. The Census Bureau has divided Lawndale into four tracts. Figure B shows the locations of each census tract and their respective boundaries. Census data is used to define population and housing characteristics for each of the individual tracts as well as for the City overall.

The Los Angeles County region experienced a decrease in population between 1970 and 1980 and an increase in population between 1980 and 1990. Migration figures for the region, however, indicate an overall increase in population over the past twenty years at a rate of 1.2 percent annually. As stated in the Current U.S. Census figures, a total of 1,727,920 people have migrated to the Los Angeles County area between the years of 1970 to 1990. The South Bay region alone has experienced an increase in population from 1,400,182 people in 1970 to 1,672,690 in 1990. The annual rate of growth in the South Bay region for this twenty year period has been 1.0%.

Regional population growth for the Los Angeles County area South Bay Region, including the City of Lawndale, is shown on Table 3. Although Lawndale's population decreased slightly between the years 1970-80, it increased at an annual rate of 1.7% from 1980-90. Like Lawndale, most of its neighboring cities experienced the same population decreases between the years 1970-80 and then substantial increases from 1980-90.

CITY OF LAWDALE
GENERAL PLAN



Census Tracts

figure B

Table 3
Regional Population Growth 1970 - 1990

	1970	1980	1990	1970-1990 % Changed
Lawndale	24,825	23,460	27,331	10.1%
El Segundo	15,620	13,752	15,223	-2.5%
Hawthorne	53,304	56,437	67,800	27.2%
Hermosa Beach	17,412	18,070	19,650	12.9%
Manhattan Beach	35,352	31,542	35,100	-0.7%
Redondo Beach	57,415	57,102	65,100	13.4%
South Bay	1,400,182	1,483,728	1,672,690	19.5%
LA County	7,041,980	7,477,412	8,769,900	24.5%

Source: Coopers & Lybrand; U.S. Census; California Department of Finance

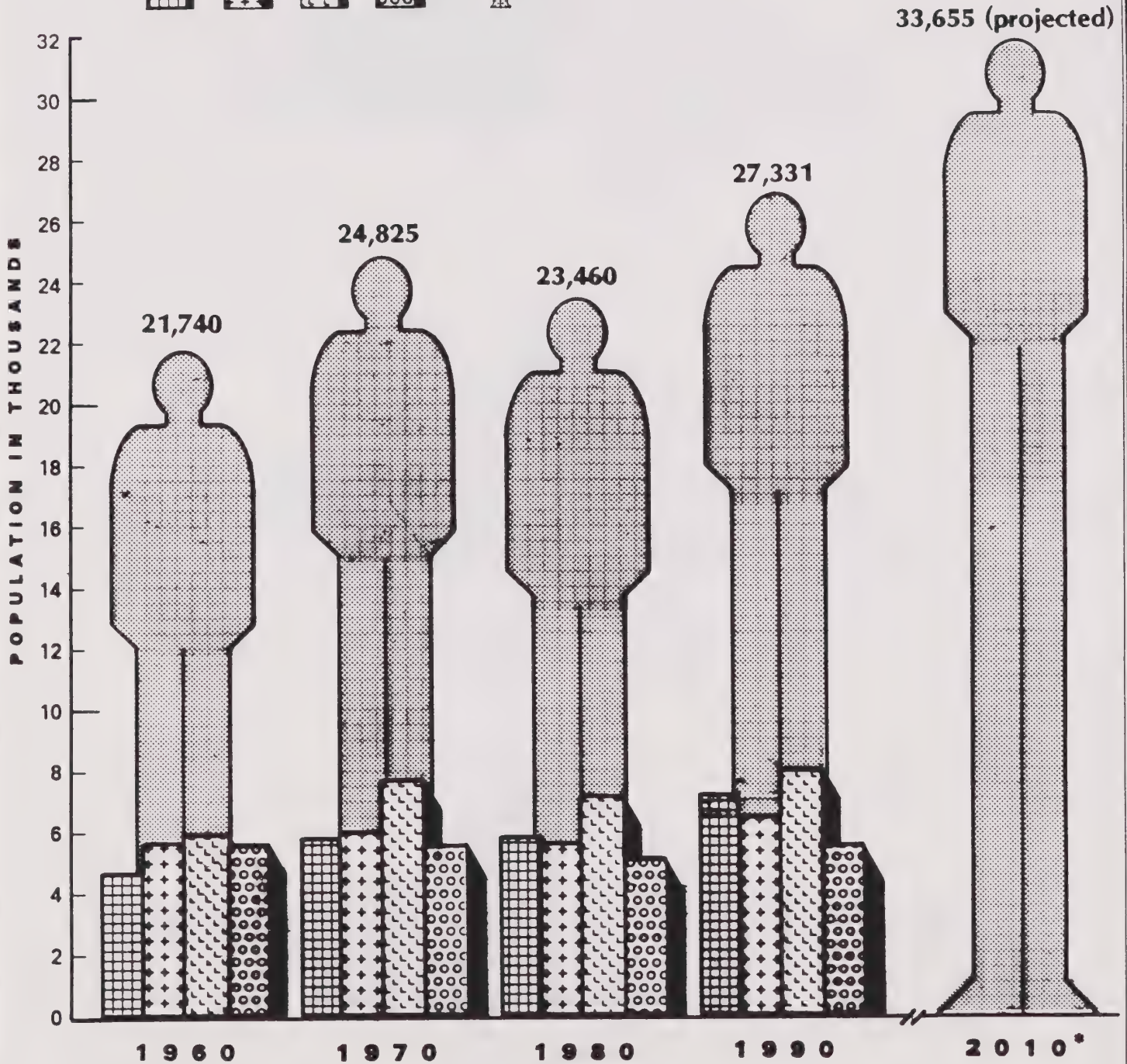
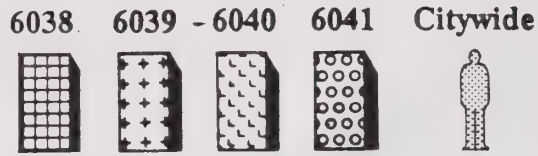
Figure C demonstrates the City of Lawndale's population growth activity for the years 1960 to 1990 with an estimated population projection for the year 2010. Each census tract's population is included, allowing comparisons for growth in each area of the City. As shown in Figure C, the City of Lawndale's population in the year 1960 was 21,740 people. Recent population figures indicate the City's current population has grown to 27,331, which is at a rate of approximately 1% per year. Tract 6040 continues to lead the City in total population.

Housing demand is based upon the needs of each age bracket within the overall population. Therefore, age distribution is an important characteristic in determining housing needs. For example, the young adult population would typically need lower cost apartments, condominiums and smaller sized single family homes. The 35-64 age group population would typically demand larger single family units, apartments and condominiums.

Figure D indicates the total number of people by sex and age in each age group. Over the past thirty years, the number of people in the 25-64 age group has repeatedly increased from 42.6% of the population in 1970, to 47.0% in 1980 and 54.0% in 1990.

Table 4, below, shows Lawndale's 1990 distribution of population by age. One-fourth of Lawndale's population is 25-34 years old, while the combined 55-64 and 65 + age categories provided only 11 percent of the population.

City of Lawnsdale
Census Tracts



* 1988 projections by Southern California Association of Governments

Source: U.S. Census data

Population Trends

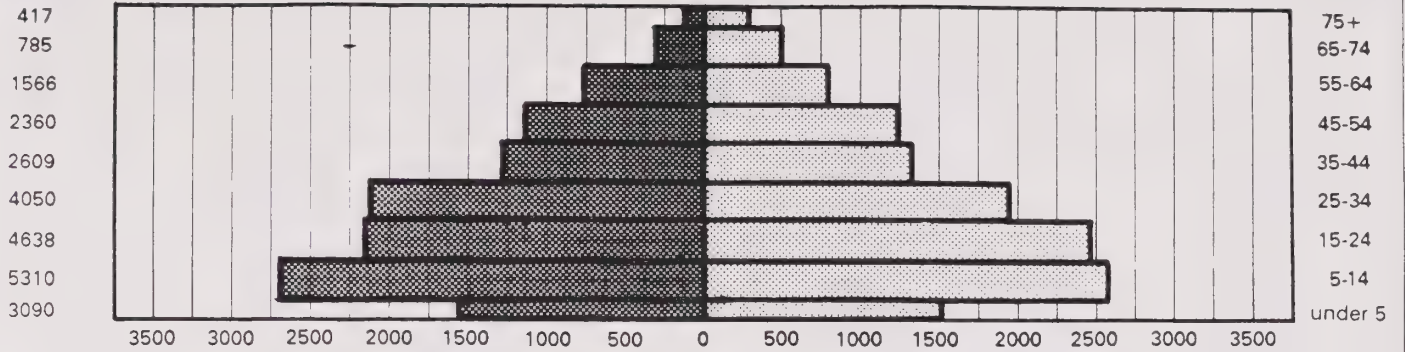
figure C

TOTAL PER
AGE GROUP

1970

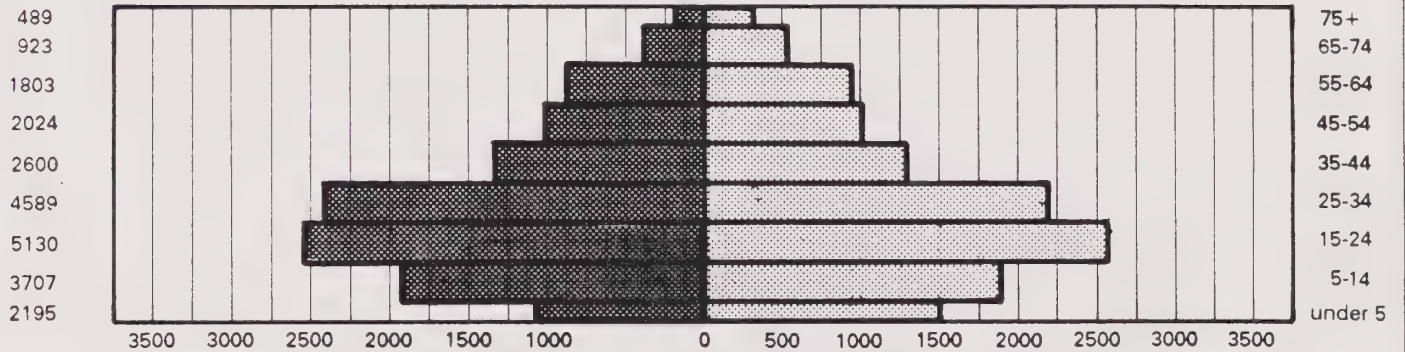
MALE POPULATION FEMALE POPULATION

AGE
GROUP



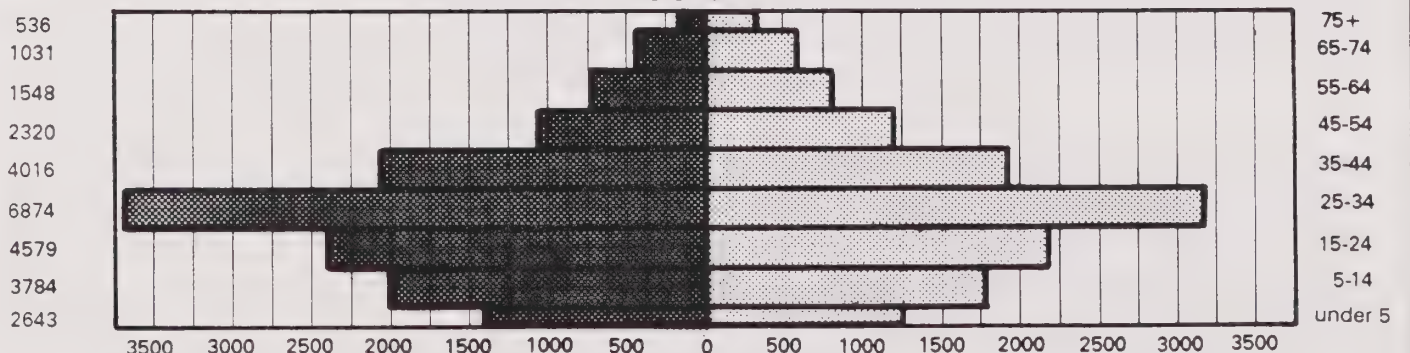
TOTAL POPULATION: 24,825
MEDIAN AGE: 23.8 YEARS

1980



TOTAL POPULATION: 23,460
MEDIAN AGE: 26.3 YEARS

1990



TOTAL POPULATION: 27,331
ESTIMATED MEDIAN AGE: 27.9 YEARS

Source: U.S. Census, 1970, 1980, 1990.

Lawndale Population by Age and Sex 1970 - 1990

figure D

Table 4
1990 Age Distribution

Age	Number of People	Percent
0-4	2,643	9.7%
5-9	2,074	7.6%
10-14	1,710	6.3%
15-19	1,782	6.5%
20-24	2,797	10.2%
25-34	6,874	25.2%
35-44	4,016	14.7%
45-54	2,320	8.5%
55-64	1,548	5.6%
65 +	1,567	5.7%
Totals:	27,331	100%

Source: 1990 U.S. Census

Changes in Lawndale's population are shown in Table 5, including the births, deaths and net migration figures for the City up to the year 1990. Population trends indicate that Lawndale experienced a population decrease of .9% annually over the eight year period from 1970 to 1978. The City's population began to increase again in 1978, at the rate of 1.5% per year. Based on the 1986 population figures, this table shows that the number of births for the 4-year time period from 1982 to 1986 was 540, or 22.5 per every 1,000 people. The death rate during the same time period was 6.0 per every 1,000 people; or 144 people. Therefore, the natural increase of population, which is based on the difference between the number of births and deaths, has continually increased over the past twenty years. This natural increase would account for a portion of the population growth in Lawndale.

The ethnic components of Lawndale's population are an important factor in determining housing needs. The 1990 U.S. Census has provided the most detailed ethnic information for this analysis. Table 6 illustrates the population and age groups by ethnicity for Lawndale. As the table shows, over 57 percent of the population consists of adults of either Hispanic or White origin. The table further establishes that the trend of Hispanic origin and White ethnicity groups representing the majority of the City will continue, as over 78 percent of the youths 17 years or less are found in these two ethnic groups.

Special Needs Assessment

To provide a thorough analysis of existing and projected housing needs, state law requires each local jurisdiction to address the special housing

Population Trends 1974-1986					
	1974	1978	1982 ¹	1986	1990
Population	24,052	23,109	23,460	24,014	27,331
Number Change From Prior 4-Year Period	-773	-943	+ 351	+ 554	+ 3,317
% Change From Prior 4-Year Period	-3.2%	-4.1%	+ 1.5%	+ 2.3%	+ 13.8%
Vital Statistics					
Live Births	456	469	541	540	NA
Deaths	154	153	112	144	NA
Birth Rate*	19.0	20.3	23.1	22.5	NA
Death Rate*	6.4	6.6	4.8	6.0	NA
Natural Increase Live Births Less Deaths	302	316	429	396	NA
Net Migration Pop. Change Less Natural Increase	-1,075	-1,259	-78	+ 158	NA

(1) Based on 1980 U.S. Census Information

NA - 1990 Census data not available

* Rates are per 1,000 Capita

Source: Los Angeles County Health Department

Population Trends

table 5

Population Characteristics						
Ethnicity	Total Persons	%	Male		Female	
			<17	18+	<17	18+
White	12,593	46.1	1,603	4,855	1,448	4,687
Hispanic Origin	9,359	34.2	1,624	3,311	1,460	2,964
Asian, Pacific Islander	3,054	11.2	459	1,092	439	1,064
Black	2,077	7.6	357	672	315	733
Am Indian, Eskimo, Alien	154	0.6	25	56	15	58
Other	94	0.3	17	22	21	34
Totals	27,331	100.0	4,085	10,008	3,698	9,540

Source: 1990 U.S. Census

Population By Ethnicity and Age

table 6

needs of its community. The City of Lawndale considers special housing needs to include families with female heads of households, large families, overcrowded households, senior citizens, handicapped people, farmworkers, and families and individuals in need of emergency shelter. Table 7 identifies the number of households or people in Lawndale that have special housing needs and may require special housing programs or facilities.

Table 7
Special Needs Assessment

Characteristics	Total
Female Head, No Husband Present	1,368 households
Large Households	1,561 households
Overcrowded	1,829 households
Seniors	1,573 people
Handicapped	N/A ¹
Farmworkers	0 ²
Homeless	50 ²

¹1990 U.S. Census information not yet available.

²Estimated

Note: Special needs figures cannot be totaled because characteristics are not exclusive of one another.

Source: 1990 U.S. Census

The City of Lawndale had an estimated 9,227 households in 1990. Of those households, 1,368 were reported to have a female as the head of the household with no husband present; 1,561 were reported to have households containing five or more people; and 1,829 were reported as overcrowded households having more than 1.01 persons per room. Overcrowding tends to occur in rental units, as 1,493 incidents of overcrowding were reported in rentals compared to 336 for owner occupied. There is also a high probability that some of the households discussed in this section may be identified as having more than one of the special needs characteristics. Therefore, it is impossible to estimate, without duplication of numbers, the percentage of total households that are considered to have special needs.

The 1990 U.S. Census reported 1,573 people in Lawndale to be of the age 65 or older. This figure indicates that approximately 6% of Lawndale's total population is made up of senior citizens. The Census has not yet released the information pertaining to the number of

handicapped people in Lawndale. However, many of the senior citizens may fall into the handicapped category as well.

The farmworker population is another group that is typically in need of housing assistance. Lawndale does not have agricultural lands within its boundaries or immediate vicinity. Therefore, the likelihood of the City having a farmworker or migrant population is considered low.

In Lawndale, non-profit programs provide temporary, emergency shelters for 33 homeless persons. The number of people seeking temporary, emergency shelter is greater than the shelters available. The South Bay office of the Los Angeles County Department of Social Services (which administers homeless assistance for Lawndale) stated that they receive approximately 2,500 applications for homeless assistance per month. A conservative estimate, based on the agency's service area, would place Lawndale's homeless population at approximately 50 persons.

The City of Lawndale's primary efforts towards housing assistance offered special needs groups is through County of Los Angeles sponsored programs. Specifically, the Section 202 program (56-unit senior project in Lawndale) and the Section 8 program, provide the greatest special needs group assistance. Table 8 shows the number of households, in Lawndale, on the General Section 8 waiting list, as well as the size of unit they are requesting. The county has stated that the average waiting period to achieve a unit is 631 days.

Table 8
General Section 8 Waiting List
City of Lawndale Residents

Characteristic	Type Unit	No. Waiting
Elderly; handicapped ¹	1 bdrm	37
	2 bdrm	15
Family ²	1 bdrm	35
	2 bdrm	81
	3 bdrm	48
	larger	13
Total		229

¹The County of Los Angeles includes handicapped with elderly in determining availability and waiting list eligibility.

²Family is generally defined as two or more persons living together.
Source: County of Los Angeles Dept. of Social Services

The City of Lawndale anticipates 10 Section 8 certificates and 6 vouchers to be received from the County in 1992. The General County Section 8 waiting list is approximately 85,000 households.

The County of Los Angeles provides additional assistance to special needs groups through the Aid to Families with Dependent Children (AFDC) Program. Families receiving AFDC assistance are estimated to be 684 (1,825 persons) and AFDC aid to families with an unemployed parent is estimated to be 103 (441 persons). The County also provides general relief assistance to approximately 88 persons in Lawndale.

Household Characteristics

Household characteristics also shape and contribute to housing demand. Smaller units with 1 or 2 bedrooms are typically occupied by a one or two-person household. Although it is not uncommon, on average, to have larger households living in the smaller units. Therefore, when evaluating the housing needs of the City, the size of a family becomes a factor.

In 1980, the U.S. Census reported 50.5% of the households in Lawndale were comprised of either one or two people, and the average household size was 2.88 people per unit. Table 9 reflects changes in household composition between 1980 and 1990. This table shows a 51.2% total increase in 1990 in the number of households with 3 or more people. The average household size increased in 1990 to 2.96 persons per household. The one and two person households were reduced over this ten year time period by 1.2%, to 48.8 percent of the population.

Table 9
Household Populations

Persons per Household	1980 Households (%)	1990 Households (%)
One Person	1,842 (22.6)	2,003 (21.7)
Two People	2,271 (27.9)	2,503 (27.1)
Three People	1,518 (18.7)	1,773 (19.2)
Four People	1,191 (14.6)	1,387 (15.0)
Five People	681 (8.4)	776 (8.4)
Six People or More	631 (7.8)	785 (8.6)
Totals:	8,134 100%	9,227 100%
Average Household Size:	2.88	2.96

Sources: 1980, 1990 U.S. Census

Household characteristics further include tenure of housing units. Tenure is illustrated in Table 10 by ethnicity. Tenure affects the nature of housing problems encountered city-wide, as renters are more susceptible to fluctuations in the cost of housing than are owners.

Table 10
Household Populations by Ethnicity and Tenure

Ethnicity	Total # Hshlds (%)	Owner (%)	Renter (%)
White	5,253 (56.9)	1,942 (67.1)	3,311 (52.3)
Hispanic Origin	2,336 (25.3)	609 (21.0)	1,727 (27.3)
Asian, Pacific Islander	829 (9.0)	299 (10.3)	530 (8.4)
Black	738 (8.0)	33 (1.1)	705 (11.1)
Am Indian, Eskimo, Aleut	53 (0.6)	10 (0.3)	43 (0.7)
Other	18 (0.2)	1 (0.0)	17 (0.3)
Totals	9,227 (100)	2,894 (100)	6,333 (100)

Housing Stock Characteristics

An assessment of Lawndale's housing stock allows for determination of deficiencies in housing type, due to age or population increase. The total number of housing units for the City of Lawndale has increased from 7,523 in 1960 to 9,778 in 1990. These numbers indicate approximately one-third of Lawndale's housing units were constructed over this thirty year time period. The number of housing units by type are shown in Table 11.

During the last thirty years, Lawndale's single family housing stock has decreased from 87.5% in 1960 to 65.9% in 1990. During the same time,

Lawndale Housing Characteristics

Units	1960 ¹		1970		1980		1990	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
Single-Family	6,584	87.5%	5,660	67.9%	5,964	69.6%	6,441	65.9%
Duplex/ Double Units	677	9.0%	993	11.9%	804	9.4%	858	8.8%
Multi-Family ²	262	3.5%	1,494	17.9%	1,682	19.6%	2,112	21.6%
Mobile Homes & Other	*	*	190	2.3%	123	1.4%	367	3.7%
Totals:	7,523	100%	8,337	100%	8,573	100%	9,778	100%

¹ 1960 Census information includes five Census Tract Areas.

² Includes condominiums, townhomes and apartments.

* Specific Mobile Homes Information was not delineated in the 1960 Census Reports.

Source: U.S. Census Reports

Housing Characteristics

table 11

the number of multi-family units increased significantly from 3.5% to 21.6%. Today, the multi-family and duplex/double units represent 30% of the City's total housing supply.

Like most Cities in the Los Angeles South Bay area, the majority of Lawndale's housing stock is thirty or more years old. Table 12 indicates that 72% of the total number of units in 1990 were constructed prior to 1970 with 54.0% of housing units, or 5,340 dwellings, constructed prior to 1960.

Table 12
Age of Existing Housing

Age of Structures	No. of Units ³	% of Total Units
Less than 15 months ¹	114	1.1
15 months to 9 years ¹	1,650	16.7
10 years to 19 years ²	1,055	10.7
20 years to 29 years ²	1,733	17.5
30 + years ²	5,340	54.0
Totals:	9,892⁴	100.0

Source:

¹L.A. County Statistical Data Department

²1980 U.S. Census Data

³Census data adjusted for unit demolitions

⁴1990 Census data adjusted for full 1990 calendar year

From 1980 to 1990 however, there were approximately 176 units, on average, constructed annually in the City. The Lawndale City Council adopted a policy in 1984, setting a goal of achieving 175 new dwelling units annually. Although figures indicate this goal has been achieved in the past, more recent data indicates the average number of dwelling units constructed has been declining. This declining trend is an important factor in determining the City's future housing needs and may require a reevaluation of the regional needs for the Los Angeles County area.

Although age of housing is important in determining the quality of housing, it is not necessarily indicative of the level of rehabilitation need. A comprehensive survey was conducted in early 1990, which rated housing structures from excellent to poor. A "fair" rating indicated a building was in need of minor repairs, whereas a building with a "poor" rating was structurally unsound and in need of major repairs.

In both ratings, it is assumed minor or major rehabilitation work was needed. The results of the study indicated that 39 percent of the residential structures were in "fair" condition and 11 percent achieved a "poor" rating. Therefore, up to 50 percent of the residential units in Lawndale are in need of minor to major rehabilitation.

According to the 1990 census, 31.4% of Lawndale's housing stock was owner occupied and 68.6% was renter occupied. Figure E reflects a decline in owner occupied units from 1960 to 1990. Renter occupied units have continued to increase from a low of 45.9% in 1960 to 68.6% in 1990.

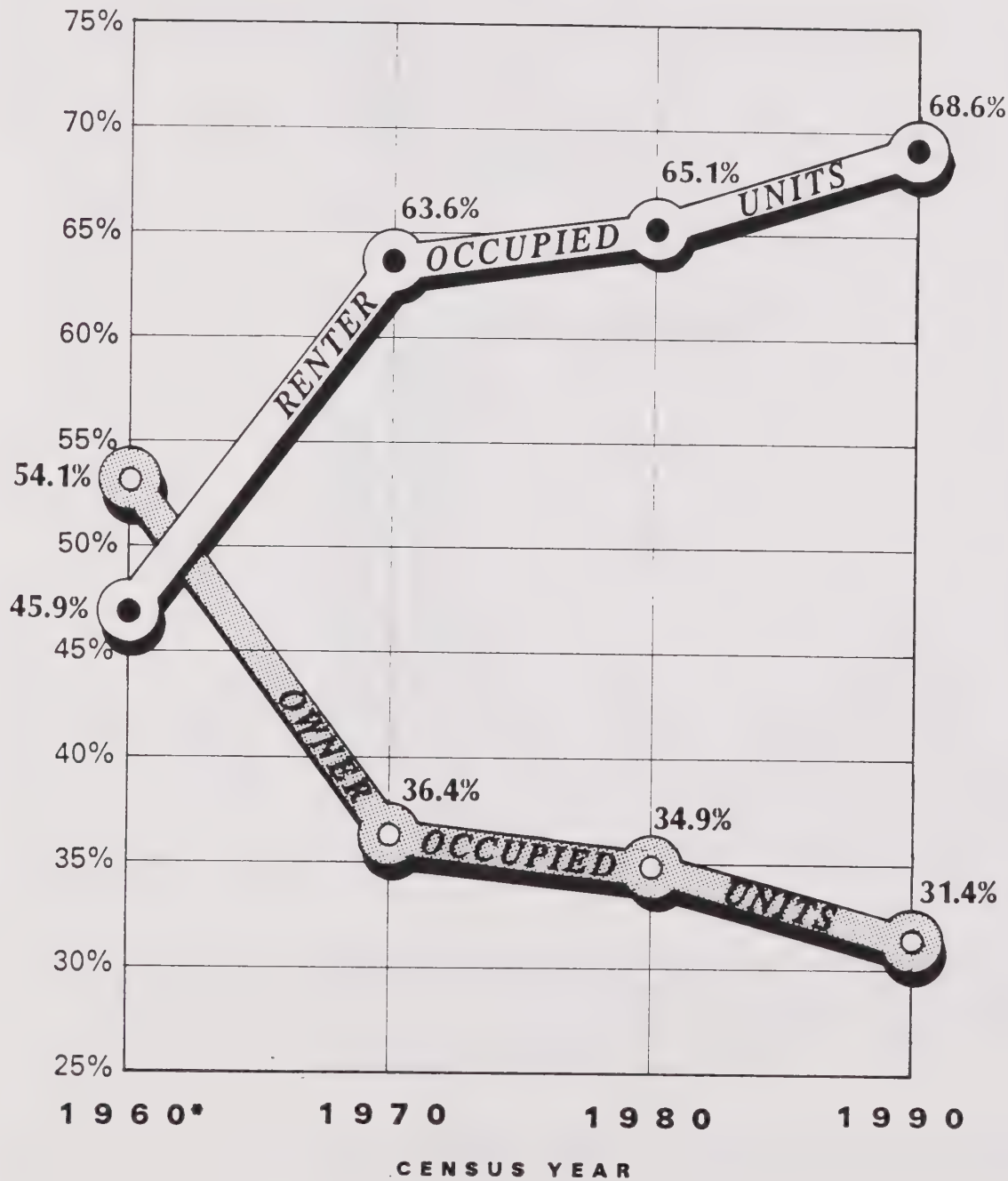
In 1990 the Census estimated a total of 551 unoccupied housing units. Of those units, 326 were single family dwellings, 40 were duplex, or double units, and 158 were multi-family units. Mobile homes and the Other category totaled 27.

According to the Regional Housing Needs Assessment, vacancy adjustments are based upon a goal of achieving a 2% vacancy rate for single family structures and a 5% vacancy rate for multi family/other structures by mid 1994. In comparing Lawndale's vacancy figures with the totals on table 11, the single family vacancy rate is 5.1% and the multi family/other vacancy rate is 6.7%.

The City's overall 1990 vacancy rate is 5.6%. The RHNA 1988 ideal vacancy rate for the City of Lawndale was 3.08%, as indicated in the RHNA. Lawndale is operating at a 2.52% higher vacancy rate than that of the 1988 ideal.

Table 13 lists the sales value of housing units and the range of monthly contract rent as reported by the 1990 Census. These figures indicate 37% of all housing units sold in Lawndale were in the \$250,000 to \$499,999 price range. Sales in the \$200,000 - \$249,999 range totaled 747 units or approximately 32%. Therefore, a total of 69% of all housing units sold in Lawndale for this reporting period were in the \$200,000 - \$499,999 range.

Table 13 also indicates a 1990 Census breakdown of rents in the City. From this table, it can be seen that over one-half of the rental units in Lawndale had monthly rents ranging from \$650 to \$999.



* Census information provided reflects 5 Census Tract Areas.

Owner vs. Renter Occupied Housing Units

figure E

Table 13
1990 Housing Rents and Sales

<u>Value of Housing Units - Sales</u>	<u># of Units*</u>
Under \$49,999	41
\$50,000 - \$99,999	68
\$100,000 - \$149,999	194
\$150,000 - \$199,999	417
\$200,000 - \$249,999	747
\$250,000 - \$499,999	872
More than \$500,000	22
Total:	2,361

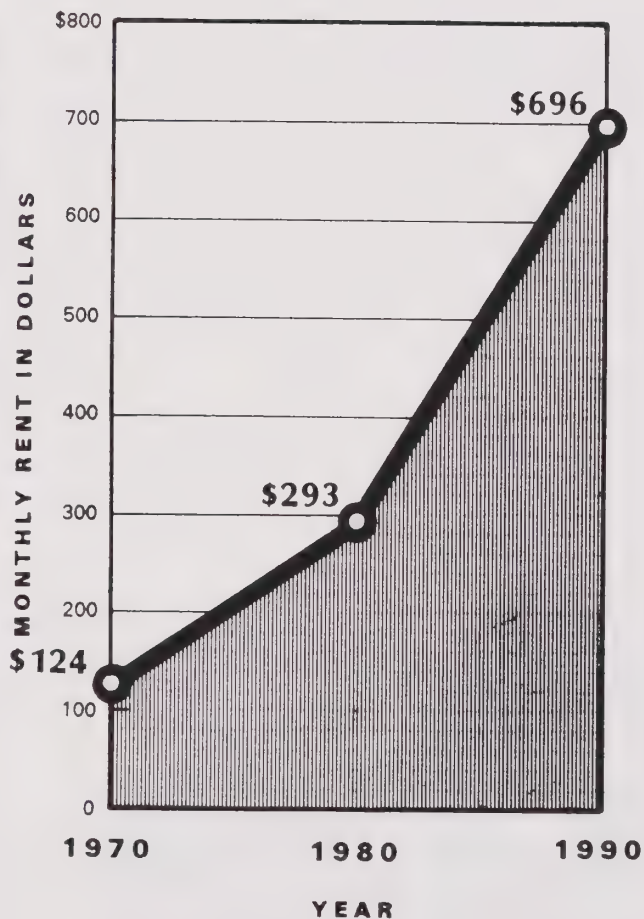
<u>Range of Monthly Contract Rent</u>	<u># of Units*</u>
No Cash Rent	57
Less than \$100	11
\$101 - \$249	205
\$250 - \$349	175
\$350 - \$449	318
\$450 - \$549	807
\$550 - \$649	976
\$650 - \$749	1,419
\$750 - \$999	1,940
\$1,000 and up	306
Total:	6,214

Source: 1990 U.S. Census.

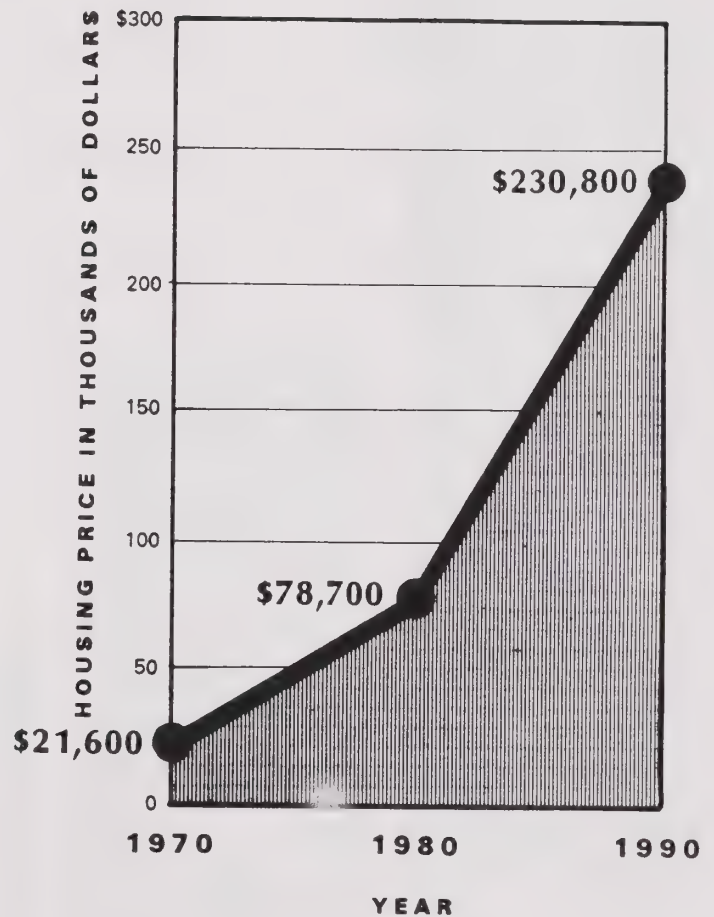
*These numbers do not match total unit count as reported in 1990 Census.

Figure F shows Lawndale's median rent and sales costs for the past 20 years. According to the 1990 census, the median sales costs of a home in Lawndale have risen from \$78,700 in 1980 to \$230,800, and the median rent is \$696 per month.

Income characteristics of the population are an important market indicator because they influence the range of housing costs in the community and affect the ability of the population to afford housing. Historically, the City of Lawndale's median income has been slightly less than that of the Los Angeles County region. Figure G provides the progression of median income changes for the years 1960-88. The median income in 1970 for Lawndale was \$9,927, compared to the Los



Median Rent Costs

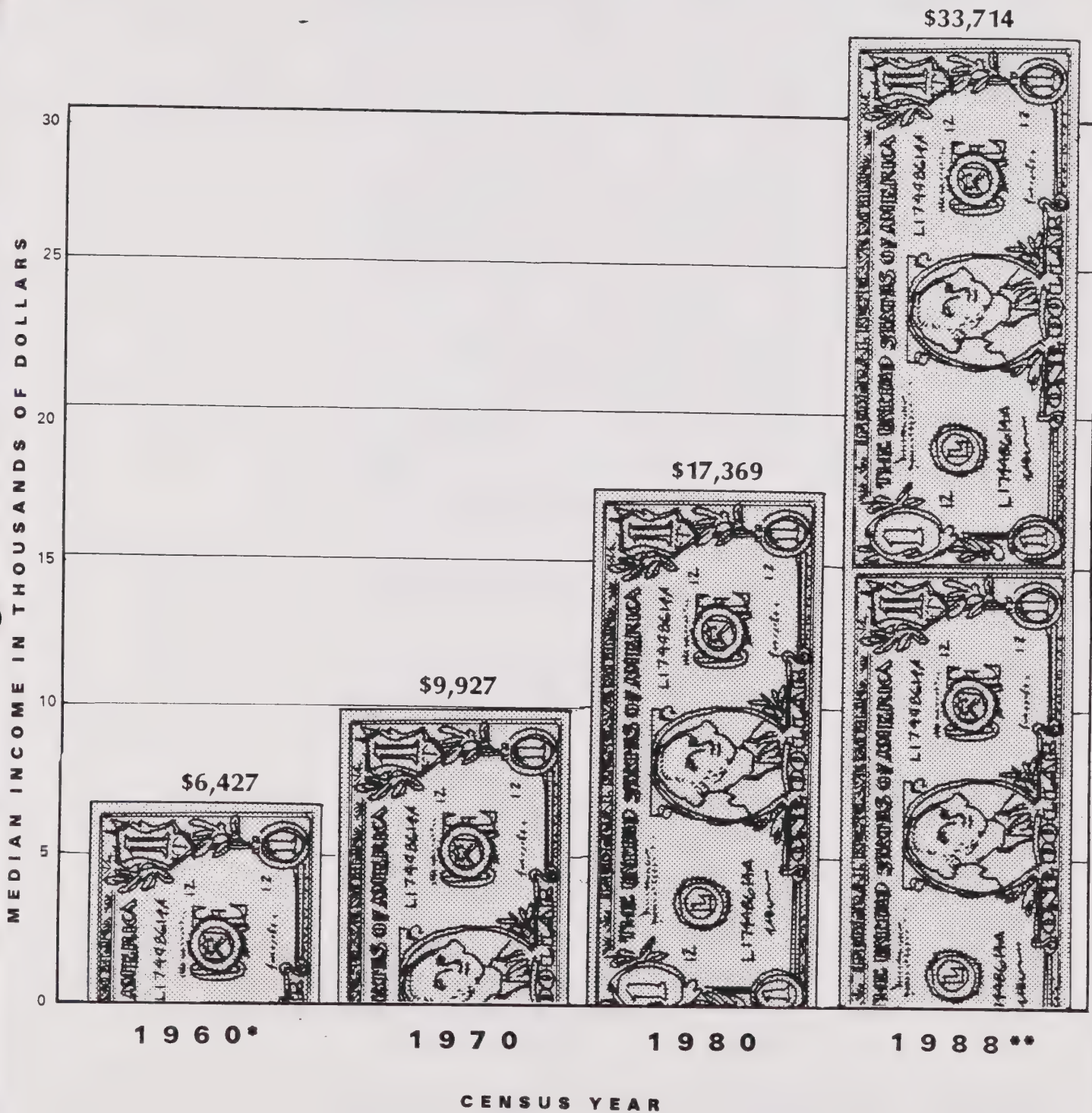


Median Sales Costs

Source: U.S. Census, 1970, 1980, 1990.

Housing Costs

figure F



* 1960 Census information included five census tract areas.
Based on Census information reported for all families.

Lawndale Median Income

figure G

Angeles County median income of \$10,972. In 1980 median incomes for Lawndale and Los Angeles County were \$17,369 and \$17,563 respectively. The SCAG Regional Housing Needs Assessment reported a 1988 median income for Lawndale of \$33,714. Income information from the 1990 Census is not currently available.

The standard measurement of housing affordability used by all agencies is that no more than 30 percent of income for very low and low income households is to be spent on housing. There is a negative correlation, however, between income and the percentage of income that is spent for housing. Generally, low income households pay a higher percentage of income for housing than high income households. In 1988, SCAG indicated that 2,022 households paid more than 30 percent of their income for housing costs in Lawndale. Table 14 divides this number into the owner-occupied and renter-occupied household categories with incomes in the low and very low categories. A total of 1,577 low income households were able to locate housing units which cost less than 30 percent of their income.

Table 14

Low Income Households In Lawndale Paying 30% or More for Housing

Listed below are the number of lower income households in the City of Lawndale in 1988 paying more than 30 percent of their income for housing.

	Very Low	Low	Total	Total% of Low Income Households
Owner-Occupied	193	75	268	7.4
Renter-Occupied	1,118	637	1,755	49.0
Totals:	1,311	712	2,023	56.0
1988 Total				
Lawndale Households:			9,020	
1988 Total Lawndale Low				
Income Households:			3,599	

Incidence of overcrowding and overpaying are indicative of the general lack of affordable larger units in the Southbay region. Contributing factors are cost of land, family size and family income. Possible resources to assist in the provision of units to alleviate overcrowding and overpaying include increased densities and larger units, which may reduce the per unit cost to developers. The City may also look to

provide additional residentially designated lands at sufficient densities, thereby increasing the supply and reducing the cost of such lands.

Similar household and median income information for low and moderate income households is listed in Table 15. The number of low income households grew from 3,182 to 3,599 from 1970-88, an increase of 13 percent.

Table 15
Low & Moderate Income Households In Lawndale

	1970	1980	1988 ¹
Households	8,337	8,573	9,020
Population	24,825	23,460	26,500 ³
Median Income	\$9,927	\$17,369	\$33,714
Low Income Households			
Up To:	\$7,942	\$13,895	\$26,971
Moderate Income			
Households:	\$7,943-	\$13,896-	\$26,972-
	\$11,912	\$20,843	\$40,457
Estimate of Low Income			
Households:	3,182 ²	3,428	3,599
Estimate of Moderate			
Income Household	N/A ²	5,145	5,421

Source:

¹1988 SCAG Regional Housing Needs Assessment up to 80% median income

²1970 Census Income Levels included to \$9,999

³Estimated

Employment Trends

Because employment of the population is directly related to income and the ability of the population to afford housing, the location of housing in relation to the location of employment has a direct impact upon the local and regional transportation system.

The January 15, 1991, Coopers & Lybrand Economic Analysis reported that the services industry in California held the highest percentage of employment in 1987. The service industry accounts for 25.1% of employment when compared to all other industry categories. Table 16 lists the type of industries reported in California and their estimated percentage of growth expected through to the year 2000. The services industry is projected to continue to lead the employment categories in the State of California with 28.2% of the workforce, by the year 2000.

California Employment Growth 1987 Annual and 2000 Projected Employment (in thousands)					
	1987		2000		1987 to 2000
Industry	Employment	% Distr.	Employment	% Distr.	% Change
Mining	41.2	0.4%	41.8	0.3%	1.5%
Construction	574.5	4.9%	722.4	4.7%	25.7%
Manufacturing	2,107.8	18.0%	2,567.3	16.6%	21.8%
Transportation, Communication & Public Utilities	582.7	5.0%	708.6	4.6%	21.6%
Wholesale Trade	689.6	5.9%	937.0	6.1%	35.9%
Retail Trade	2,072.3	17.7%	2,834.4	18.4%	36.8%
Finance, Insurance, Real Estate & Combinations	800.7	6.9%	1,093.7	7.1%	36.6%
Services	2,926.7	25.1%	4,345.6	28.2%	48.5%
Government	1,883.8	16.1%	2,180.6	14.1%	15.8%
Totals:	11,679.3	100%	15,431.4	100%	32.1%

Source: Coopers & Lybrand, Economic Analysis - January 15, 1991 (California Employment Development Dept.)

California Employment Growth

table 16

Specific employment characteristics of 1987 for Lawndale residents are shown in Figure H. The services category, again, has the highest percentage of employment at 32%, with the retail and wholesale trade industries having shares of 17 and 16 percent respectively. Combined, the services and trade industries account for 65% of the total employment in Lawndale. The Coopers & Lybrand report indicated there were 5,853 jobs in Lawndale in 1987, which yields 3,804 jobs in the service and trade industry for that year.

Employment growth in the South Bay region is expected to continue to increase over the next twenty years. Figure I depicts the projected increase in employment for Lawndale and other cities in the South Bay Region from 1987 to the year 2010. This figure indicates a .44 percent annual increase in employment for the Lawndale/Hawthorne area.

Commuting distances for Lawndale residents are shown in Figure J by 5-mile, 10-mile and 15-mile radii. The relationship between the locations of housing and employment has an impact on the City and the regional transportation system. The City of Lawndale is surrounded by major employment centers in neighboring Cities. Thus, substantial commuting occurs between the employment sites outside of the City of Lawndale and its residential housing areas.

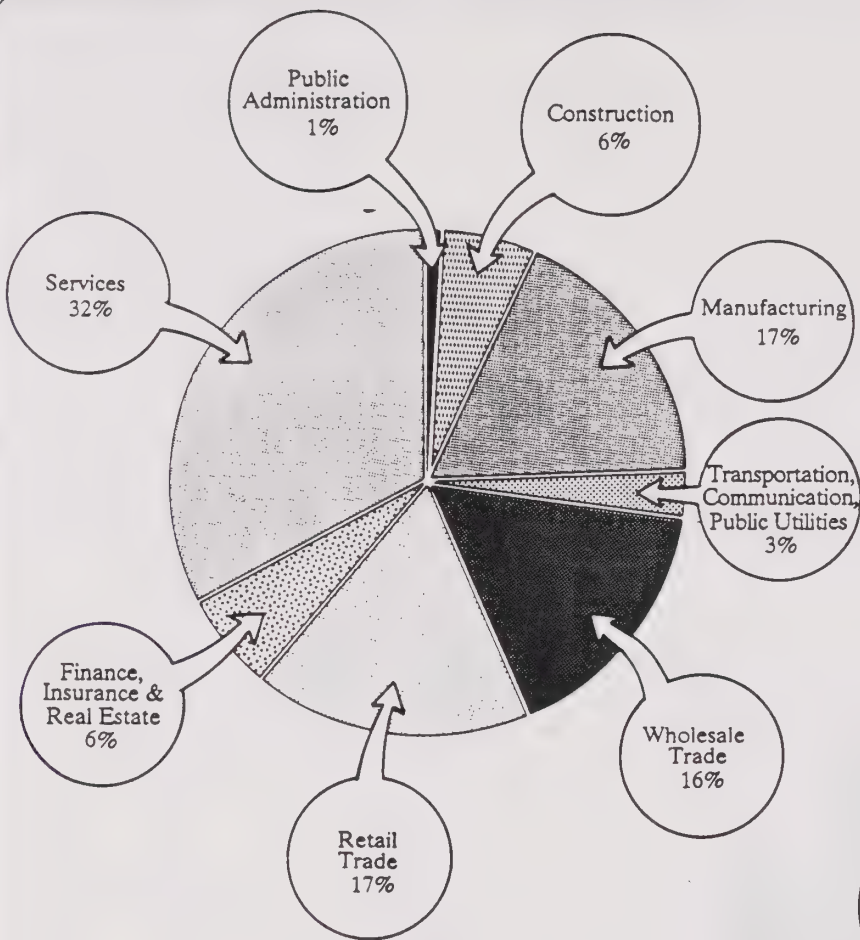
Lawndale is a housing rich, job poor city. Figure K portrays the ratios of jobs to housing units for cities in the South Bay Region in 1984, and projects them to the year 2010. In 1984, Lawndale had approximately .9, or less than 1 job per household. In 2010 Lawndale is expected to have 0.75 jobs per household, which means an increase in housing and a further reduction in jobs.

Regional Housing Needs Assessment

According to state law, every local government must address in their housing needs assessment a discussion of their fair share of the projected housing needs for their region. The 1988 Regional Housing Needs Assessment prepared by SCAG, projected a total of 1,330 new housing units to be provided in the City of Lawndale by June, 1994. The required number of units by income levels are shown in Table 17. According to the Los Angeles County Statistical Data Department, a total of 549 dwelling units, or an average of 183 dwelling units per year, were constructed in Lawndale during 1988, 89 and 90.

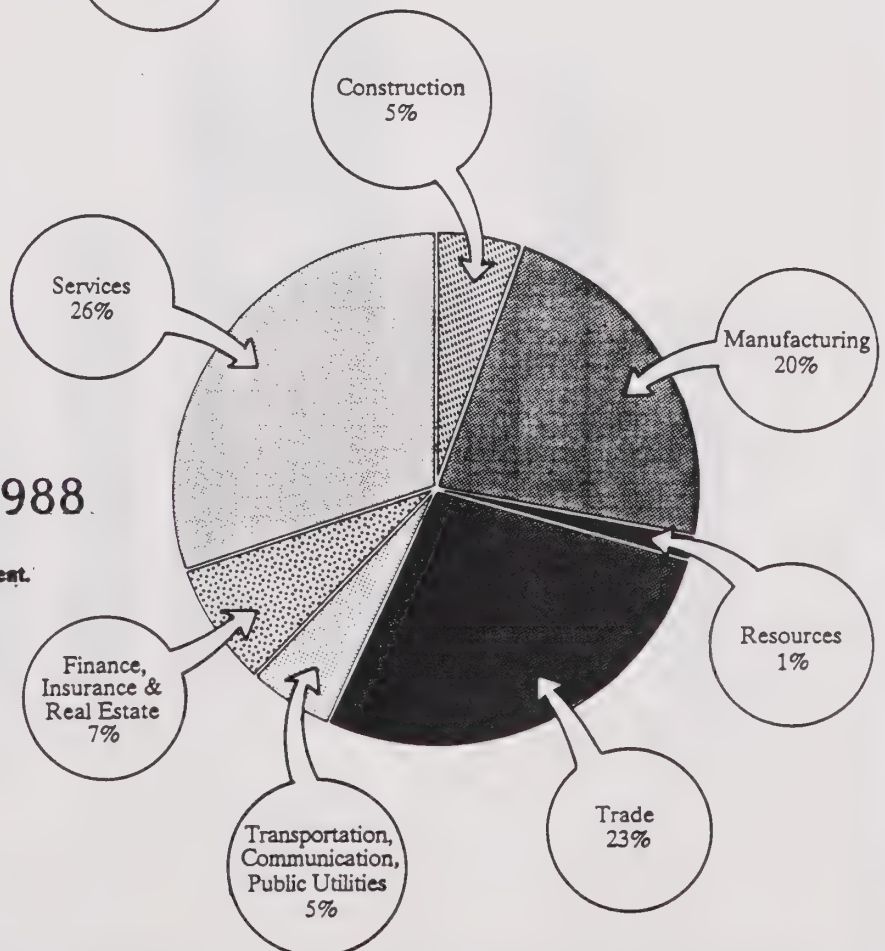
Lawndale - 1987

Source: Donnelley Marketing Information
Services, Market Profile Analysis



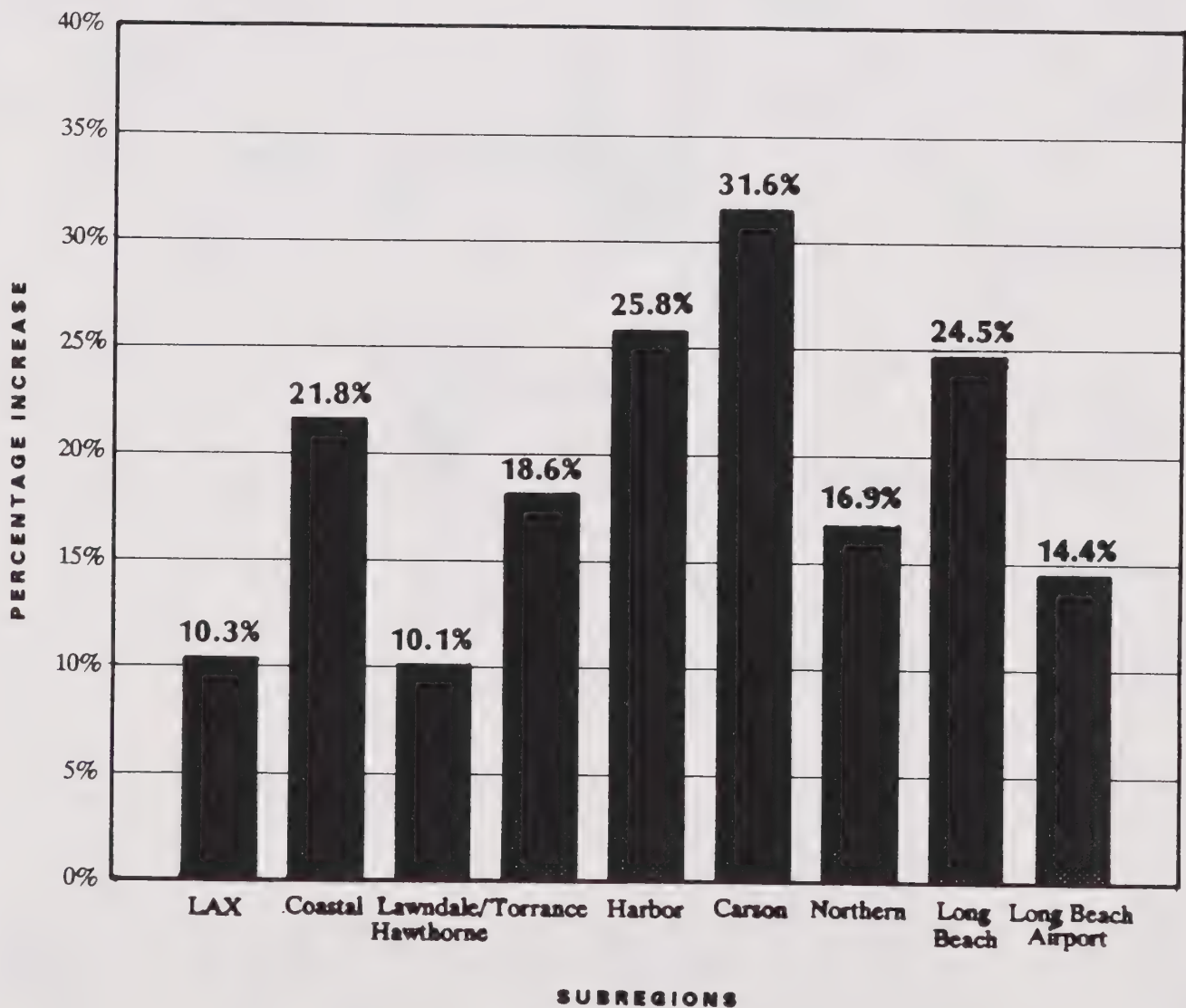
Southern California - 1988

Source: California Employment Development Department



Employment by Industry

figure H



Source: Southern California Association of Governments

Employment Growth in South Bay Region 1987 - 2010

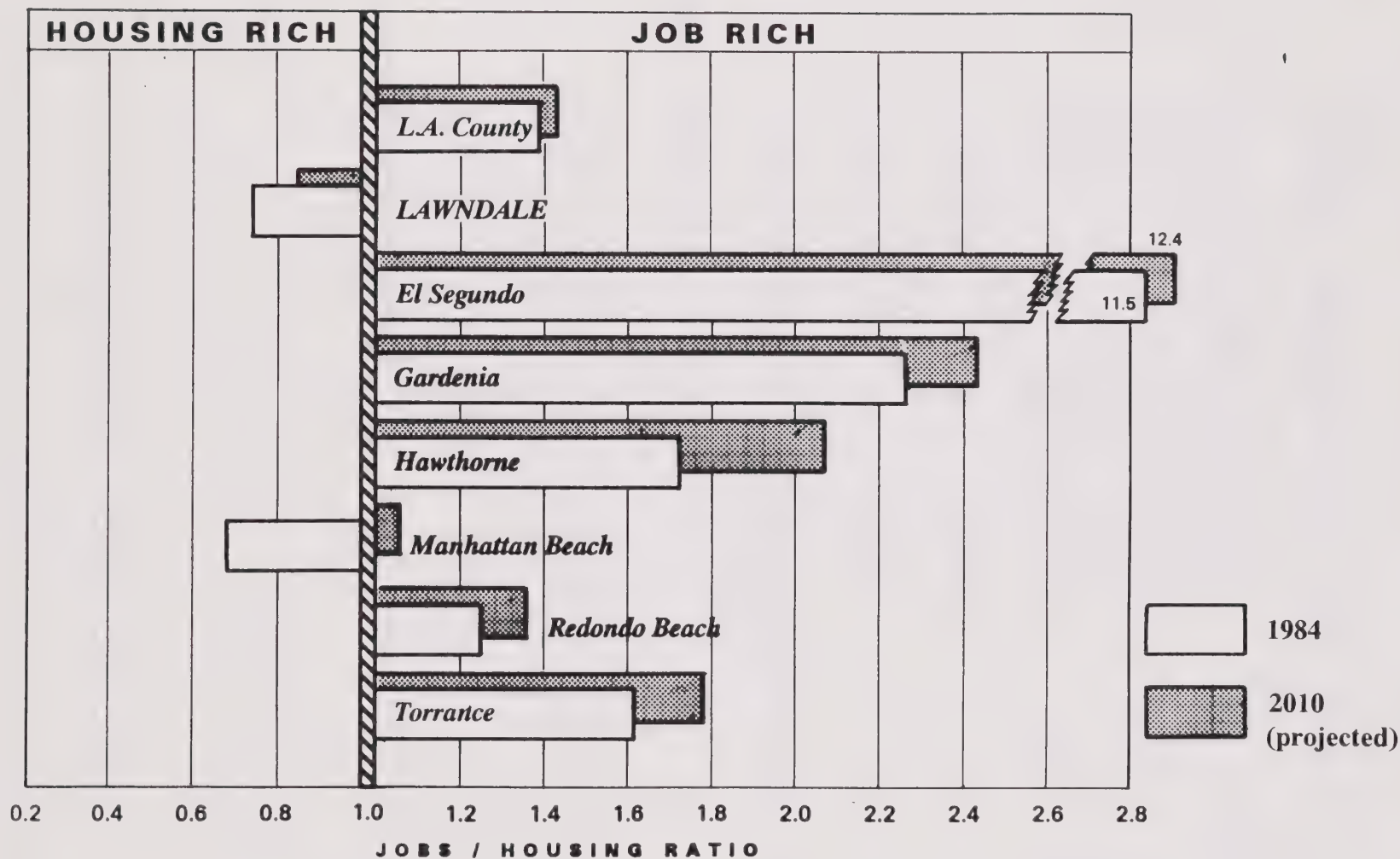
figure I



Commuting Distances for Employment for Lawndale Residents

figure 1

SOUTH BAY REGION



Source: Southern California Association of Governments

Table 17
Lawndale's Regional Housing Needs Assessment Summary

Income Level	Req'd. New Units 1/88-6/94	% of Total	Actual Built	% Achieved
Very Low	230	17.3%	0	0
Low	302	22.7%	56	18.5
Moderate	265	19.9%	57	21.5
High	533	40.1%	436	92.5
Totals:	1,330	100.0%	549	N/A
Less Units Constructed				
1988 - 1990	549	41.0%		
Units Needed to Meet				
Regional Housing				
Needs by 6/94:	781	59.0%		

Source: 1988, SCAG Regional Housing Needs Assessment L.A. County Statistical Data Department; City of Lawndale

Housing Opportunities and Constraints

Vacant Lands

Very little developable vacant land remains in the City of Lawndale as shown in Table 18. As of March, 1990, there was a total of approximately 9.3 acres of vacant land available. The Two Family Residence Zone (R-2) accounts for 24.8% of the vacant land. Another 22.9% or 2.5 acres was zoned C-3, Unlimited Commercial Zone. These two classifications alone, represent one-half or 5.2 acres of the total vacant land available for development. Land indicated on this table in each of the land use zones includes more than one site.

Table 18
Vacant Lands Inventory

<u>Zoning Classification</u>	<u>Amount of Vacant Land¹</u>	<u>Percent</u>
Single-Family Residence Zone (R-1)	0.5 Ac	5.4%
Two Family Residence Zone (R-2)	2.8 Ac	30.1%
Limited Multiple Residence (R-3)	1.4 Ac	15.0%
Limited Residence Zone (R-4)	0.2 Ac	2.2%
Unlimited Commercial Zone (C-3) ²	2.0 Ac	21.5%
Unlimited Commercial Zone (C-4) ²	0.4 Ac	4.3%
Light Manufacturing Zone (M-1)	2.0 Ac	21.5%
Total Vacant Land:	9.3 Acres	100%

Source: March, 1990, The Lightfoot Planning Group, Land Use Inventory

¹Acreages have been rounded off. Actual acreages can be found in Table 4 of the Open Space Element.

²Specific Residential Uses permitted within these zones.

There is a relatively small amount of vacant, residentially zoned land remaining in Lawndale. It appears, however, that the City's regional need for low and moderate income households can be satisfied through a combination of units built on vacant parcels, re-use of existing parcels and additional units built on existing parcels. The net density increase for all residential designations proposed in the Land Use Element is projected to yield an additional 5,085 units.

The Land Use Plan includes the conversion of industrial lands to residential designations and permits increased densities. Based on existing zoning, the vacant lands could yield approximately 100 units. However, due to increased densities, more residentially designated lands, and second units on existing residentially used lots, actual unit capability is increased tremendously. Furthermore, since the City is pursuing revitalization, affordable housing opportunities are increased due to tax increment financing.

Residential Land Use Categories and Housing Types

The range of land use classifications and variety of unit types ensures that housing opportunities will be available for Lawndale residents of all incomes. Table 19 identifies Lawndale's land use classifications and the associated density ranges and typical unit types allowed for development in each. For example, in the single family medium density classification, single family homes or duplex/double units can be approved for development at a density of 8.9 to 17.6 dwelling units per acre.

Based upon the annual assessment by SCAG of the development of 183 units per year for 1988 through 1990, Lawndale has not been meeting all of the housing needs of its community for the past 3 years. The City would need to continue to encourage development of 195 units per year over the remaining 4-year time period within the moderate, low and very low income categories in order to meet their "fair share" of the regional housing needs of 781 projected units.

Table 19
Residential Land Use Classifications

Land Use Classification Density Range		Typical Unit Type
Single-Family Low Density	0-8.9 du/ac	Single-Family Detached
Single-Family Medium Density	8.9-17.6 du/ac	Single Family/Duplex/ Double Units
Medium-Family Low Density	8.9-17.5 du/ac	Townhomes/Apts.
Medium-Family Medium Density	17.6-49.0 du/ac	Condominium/Apts.
Medium Family High Density	49.0-58.0 du/ac	Condominium/Apts.

Governmental Constraints

Potential and actual governmental constraints upon the maintenance, improvement and development of housing for all income levels includes land use controls, codes, fees and other requirements of building permitting. Typically, the General Plan, development review process and fees for development pose any governmental constraints that may be present in the City.

The Lawndale General Plan supports the conversion of industrial lands to residential, increased densities and fast track permit processing for qualifying projects. One General Plan constraint on the provision of housing is related to public facilities. Policy language forbids development where adequate public facilities are not demonstrated. This constraint however, is consistent with the maintenance and improvement of the public infrastructure system and overall quality of life for Lawndale.

Lawndale's development review process poses a minor constraint for the provision of housing. requirements placed upon new housing developments to ensure conformance with the General Plan and Zoning Ordinance can increase costs of development, depending upon the conditions of approval (i.e., undergrounding utilities, minimum unit size, etc.). In many cases, however, the costs are offset by the processing times for development review, which are shorter in length than is typical in other jurisdictions. Rehabilitation of existing units are encouraged by the City. The City offers low cost loans for rehabilitation and are currently formulating a grant program to assist in rehabilitation efforts.

The fiscal factor in terms of governmental constraints are development fees. Fees paid to the City include, but are not limited to: planning fees, building fees, and engineering fees. Fees paid to the City are consistent with the amount of fees paid to the local jurisdictions in Los Angeles County and, in some cases, are substantially less.

Non-Governmental Constraints

Non-governmental constraints also affect the provision of housing. These constraints typically include the availability of financing, the price of land and the cost of construction.

Financing for homebuyers in recent years has shown a decrease in interest rates, thereby reducing mortgage payments. Many lending institutions have lowered interest rates below 10 percent. This lowering of interest rates is offset somewhat by the tighter qualifying requirements.

The price of land in Lawndale may pose the greatest constraint for the development of housing. The high cost of land, in many cases exceeds \$100,000 for a 5,000 square foot parcel, is caused by the locational advantage Lawndale finds itself in and the built-out nature of the City (thereby reducing supply). These two conditions have escalated the price of land so much that a government subsidy or mark-down may be necessary to provide affordable housing.

The cost of construction includes labor, materials financing and land. As stated previously, land costs are high in Lawndale. Labor and materials can account for 40-50 percent of the cost of construction. Financing has been a major problem in that many banks are hesitant to lend on construction loans when the homebuying market is weak. Therefore, it is difficult to achieve financing for developments.

Government Funding Programs

The City of lawndale has many options for the provision of housing for all segments of its population. Among available options are local, state and federal programs. Although the City may not wish to institute the programs, they are discussed to further identify possible solutions to Lawndale's housing needs.

Local

The City may consider using land write-down techniques for housing production. Land write-down is a method by which the City can purchase land through the use of grant monies which can then be offered at a decreased cost to developers. In return, the developers agree to construct affordable housing to increase the supply of low and moderate income housing ownerships.

The City can also maximize use of tax increment financing to provide funding for low and moderate income households. Through the redevelopment process, when conditions are favorable, the City can encourage the issuance of municipal bonds to finance mortgages, to establish a revolving loan fund, or to establish a housing assistance program. Mortgage revenue bonds under AB1355 and SB99 can be used to encourage the construction of single-family ownership housing. The City can also issue mortgage revenue bonds under AB665 to develop multiple-family rental units. (AB1355 allows cities/counties to issue mortgage revenue bonds for the construction of owner-occupied single-family units or for rehabilitation. SB99 enables redevelopment agencies to issue mortgage revenue bonds for the same purpose.)

State

State mortgage revenue bond programs under the California Housing Finance Agency (CHFA) are available for low and moderate income first time homebuyers and renters.

The City may encourage private sector participation in the provision of low and moderate income housing by offering incentive programs to developers who provide at least 20% of the total housing units to lower income households, rental or ownership. The State Predevelopment Loan Program can provide low cost financing in developing assisted housing for lower income persons.

State funded rehabilitation and construction programs include;

- Family Housing Demonstration Program (HCD)
- Home Mortgage Purchase Program (CHFA)
- Predevelopment Loan Program (HCD)
- Rental Housing Construction Program (HCD)
- Rental Housing Mortgage Loan Program (CHFA)
- Self Help Housing (CHFA & HCD)
- AB 665 (1982) Bonds - Renter occupied construction
- Funds authorized by the Mark-Furon Residential
- Rehabilitation Act and SB 99 - New construction
- California Energy Conservation Rehabilitation Program
- Deferred Payment Rehabilitation Loan Fund (HCD)
- Home Ownership Mortgage Bond Program (CHFA)
- Home Ownership Assistance Program (HCD)
- Matching Down Payment Program (CHFA)
- Natural Disaster Assistance Program (HCD)
- Non Profit Housing Program (CHFA)
- Farmworker Housing Grant Program (HCD)

- Mobile Home Park Assistance Program (HCD)
- State Legalization Impact Assistance Grant Program (HCD)
- State/Local Multi-family Program (HCD)
- Federal Emergency Shelter Grants Program (HCD)
- Senior Citizen Shared Housing Program (HCD)

Federal

Community Development Block Grants, the Section 8 rental subsidy program and the Housing Voucher program all help to provide housing for low and moderate income households.

Federally funded rehabilitation and construction programs include;

- Section 202 Direct loans for elderly and handicapped housing.
- Section 502 Rural home ownership assistance.
- Section 515 Rural rental housing assistance.
- Section 17 Rental housing rehabilitation.
- Section 317 Rehabilitation loans.
- Housing and Community Development Act Block Grants.

These lists of financial and assistance programs are not all-inclusive, and many programs may not have available funding at this time. It is important that the City familiarize itself with the application process and availability of these funds.

Lawndale Programs

The City of Lawndale has available a number of programs designed to encourage the maintenance of existing housing, protect the housing supply affordable to very low, low and moderate income households, and encourage the development of a variety of unit types and prices to meet the needs of all its residents.

Community Development Block Grants

Lawndale participates in the Urban County Block Grant Program administered by the County of Los Angeles. Funding has been used to provide deferred, no-interest loans for residential rehabilitation.

In addition to these programs, the County also administers a separate housing rehabilitation program and funds a fair citizens housing counseling service which is available to eligible citizens of participating jurisdictions. Lawndale will continue to participate in this program so long as funding is available.

Rental Assistance

The Housing Authority of the County of Los Angeles administers the Section 8 Rent Subsidy program for the City. The Section 8 program makes up the difference between the market rent on a house or apartment and 25% of the eligible lower income tenant's monthly income. Currently, approximately 100 households in Lawndale are enrolled in this program.

Mortgage Revenue Bonds

These are bonds sold by the City to create a pool of money for subsidized mortgages. The bonds are serviced through a return rate on the mortgage or resold on the bond market. The up-front cost of issuing bonds are prohibitively expensive for a small issuing. To reduce the "up-front" cost of the issuance of a Mortgage Revenue Bond that will cover only a small amount of mortgages, many cities have formed pools in a cooperative effort to spread the up-front cost among several cities or housing authorities. Mortgage revenue bonds can be issued for multi-family or single-family developments, but multi-family bonds have become less in demand and more difficult to issue due to recent changes in the tax code.

Public Financing

The State Housing and Community Development Agency, and the Department of Housing and Urban Development offer construction, rehabilitation, and permanent financing as low as 3% to qualified applicants, such as housing authorities or private non-profit developers. These funds are competed for based on participation of other funding sources and local need.

Low Income Permanent Financing

A consortium of banks and savings and loans has formed an organization (SAMCO) designed to offer private, below market, permanent financing for low income projects. This organization is based in San Diego and is a prime source for below market financing for low income projects.

Community Reinvestment Act

This act requires lending institutions to report on their lending activities and how they meet the needs of the community. Lending institutions may face official sanctions for not meeting performance goals. A City may have a program to evaluate an institution's lending practices for its community. It may also impose its own sanctions. These sanctions may include withdrawal of funds by the City or

cooperating businesses from lending institutions who have not made adequate mortgage or construction financing loans in their community.

Redevelopment Set-Aside Funds

Current State law requires that 20% of tax increment returns be set aside for low-to-moderate income housing. This program is a good source of gap funding that the City may use to help fund qualified low income residential projects.

Section 202 Senior Housing

Lawndale participates, through the County of Los Angeles, in the Section 202 program which provided assistance to a 56-unit senior housing project in the City.

Century Freeway Replenishment Housing Program

This program is administered by the State Department of Housing and Community Development and is responsible for locating housing units for those displaced by the construction of the Century Freeway. All cities within a three-mile corridor along the designated freeway route are entitled to participate in the replenishment program. In 1984, Lawndale anticipated that 75 units (15 per year) could be available to assist low income households.

Energy Conservation

At this time, the City enforces all applicable State and federal laws relative to energy conservation but does not have any programs which actively promote conservation efforts. The City Building Department has, in recent years, worked with various developers and homeowners to provide or retrofit their homes with energy conservation devices or treatments.

Goal and Policies

Goal 1. Housing Opportunity

Provide housing opportunities for all, regardless of race, age, martial status, ethnicity, sex, religion or household composition.

Policy 1a

Promote governmental efforts to provide equal opportunity housing for existing and projected demands in Lawndale.

Policy 1b

Accommodate the City's fair share of the regional housing needs.

**Goal 2.
Housing Supply****Policy 1c**

Identify segments of the population that have special housing needs and develop programs to serve those needs (i.e., single parent, elderly, handicapped, large family, minority and homeless populations).

Maintain a housing supply that varies sufficiently in size, design, tenure and type to meet the needs of existing and future Lawndale residents.

Policy 2a

Encourage joint public and private investment in existing and new housing stock, including joint employers and employee arrangements.

Policy 2b

Establish and implement streamlined procedures for processing new residential development permits which will increase the City's supply of affordable housing.

Policy 2c

Increase the amount of owner occupied households in the City to 40%, overall, by 1997.

**Goal 3.
Housing Affordability**

Promote the development and maintenance of affordable housing for all economic segments of Lawndale.

Policy 3a

Encourage the construction of new housing units for lower and moderate income households through use of financing mechanisms and programs available from local, state and federal agencies, such as the government funding programs that are listed on Page II-4-38.

Policy 3b

Continue use of federal and state housing assistance programs for lower and moderate income households.

Policy 3c

Utilize available financial tools and resources that reduce the sale price or payments for new housing so that it is affordable to lower income households.

Policy 3d

Establish and maintain a condominium conversion program to make home ownership possible for a larger segment of the population.

**Goal 4.
Housing
Preservation and
Infrastructure**

Utilize public and private resources to preserve existing residential neighborhood characteristics and to ensure adequate infrastructure for housing needs.

Policy 4a

Encourage the preservation, rehabilitation or, if necessary, like replacement of single-family dwelling units in order to maintain the established characteristics of City neighborhoods.

Policy 4b

Allow the replacement of multi-family residential units at previous density levels, if such units are lost through natural or man-made disasters, e.g. earthquakes, fire, etc.

Policy 4c

Prepare a comprehensive historic preservation study of the City structures. Encourage the preservation and rehabilitation of historic and architecturally significant structures.

Policy 4d

Promote the types of housing in new residential developments which are compatible with the character of the surrounding housing stock.

Policy 4e

Investigate property maintenance programs using incentive-based standards for residents and property owners, to retain and maintain community aesthetics and appearance.

Policy 4f

Investigate the institution of a code enforcement program.

Policy 4g

Provide programs for the rehabilitation of substandard and deteriorating units, e.g. existing Home Improvement Program. Develop guidelines for replacement housing, where rehabilitation or renovation are infeasible.

Policy 4h

Develop City programs which address upgrading and/or improvement to public facilities and services in residential neighborhoods undergoing revitalization.

Policy 4i

Maintain or improve levels of environmental and aesthetic quality and compatibility in all residential areas.

Policy 4j

Strengthen the housing inspection program to ensure that publicly assisted lower income units meet applicable building and housing codes.

**Goal 5.
Housing Cooperation
and Coordination**

Encourage housing programs involving cooperative efforts between public agencies and the private sector.

Policy 5a

Coordinate the activities of government agencies, citizens and non-profit groups, advisory commissions and the private sector to ensure that housing programs requiring joint efforts, especially public/private, have the necessary representatives involved.

Policy 5b

Encourage a cooperative effort for providing low to moderate housing opportunities in Lawndale by private developers utilizing governmental assistance.

**Goal 6.
Energy and
Resources
Conservation**

Promote new housing and improvements to existing housing that are energy efficient and conserve natural resources.

Policy 6a

Encourage new home construction using the best available energy conserving materials, building techniques and siting.

Housing Implementation Programs

1. Housing Opportunity

1.1. Housing Needs Monitoring Program

The City shall periodically review SCAG Regional Housing Needs Assessments to determine whether needs of special groups (i.e., single parent, elderly, handicapped, large family, minority and homeless populations) are adequately met. Utilize appropriate housing programs to meet those needs.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Ongoing

1.2. Equal Opportunity Housing

The City shall periodically review and update City Council policies to maintain equal opportunity housing programs.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Ongoing

1.3. Housing Programs for Special Needs Groups

The City shall establish City programs that use available Federal and State funds to supplement the rents of lower income households, with particular emphasis on senior, disabled persons or single parent households.

Responsible Agency: Lawndale Department of Community Development

Funding: CDBG Funds for Low and Moderate Income Families

Schedule: 100 Units by 1994

1.4. Regional Housing

In order to ensure quality, well planned residential growth, while meeting the City's regional housing responsibilities, the City shall review proposed residential projects, general plan amendments and zone changes for short and long term effects on regional housing needs. The review shall consider the balance between proposed developments, and the constraints of the available infrastructure, fiscal, and environmental resources, and the current mix of housing.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Ongoing

1.5. Senior Housing

The City shall establish housing guidelines, including accessibility and emergency service responses, designed specifically for seniors desiring smaller, more efficient types of units that will allow continued independent living within the community.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Adopt Housing Guidelines by January 1, 1993

1.6. Homeless Housing Program

The City shall encourage and assist non-profit and charitable organizations to provide shelters and transitional housing for the homeless. The

City shall also coordinate with surrounding cities, in providing transitional housing on a regional scale for homeless people.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund

Schedule: Add Facilities for 50 More Homeless persons by January 1, 1993

1.7. Housing Internship Program

Create a position for a part time intern who will be involved in work related to housing. The intern should be a graduate student enrolled in the planning program of a local university. The intern's responsibilities should include:

- The development of a program that would offer incentives to developers to provide housing for persons eligible for Section 8 rental assistance.
- Encouraging more of the City's landlords to become involved in Section 8 rental assistance.
- The creation of a housing referral service which would have the following functions:

Maintaining a directory indicating housing that is available and accessible to elderly, handicapped and low-income citizens.

Serving as information source for those interested in participating in local, state and federal housing programs.

Responsible Agency: Lawndale Department of Community Development
Funding: CDBG Funds
Schedule: Ongoing

2. Housing Supply

2.1. Federal Programs

Make available, to those interested in constructing new housing, information regarding the availability of funding for FHA and HUD housing programs.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund
Schedule: Ongoing

Responsible Agency: Lawndale Department of Community Development
Funding: No Direct Funding Required
Schedule: Ongoing

2.3. Streamlined Permit Procedures

The City shall propose housing units, that will increase the supply of affordable for sale units, will be expedited through the applicable City review process. Streamline procedures to be administered by a City designated coordinator.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund
Schedule: Review Existing Permit Procedures and Remove Constraints by July 1, 1992. Designate Housing Coordinator by July 1, 1992

2.4. Home Ownership Program

The City shall track the percentages of home ownership, compared to rentals on an annual basis. Annual increases of 1% will be necessary to meet projected 40% ownership by 1997. For each year in which the annual increase is not met, review ownership incentive programs and adjust as necessary.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund
Schedule: Annual Review

2.5. Revolving Loan Program

Identify available financing that could be utilized in establishing a revolving loan program for new unit construction. Monies repaid to the program would be re-allocated to maintain housing supply for those persons meeting program requirements.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund
Schedule: 80 Units by 1994

2.7. Rental Vacancy Monitoring Program

The City shall allow no condominium conversions to occur when the City's rental vacancy rate is below 3% over four consecutive quarterly reporting periods.

Responsible Agency: Lawndale Department of Community Development
Funding: No Direct Funding Required
Schedule: Annual Review

3. Housing Affordability

3.1. Public Section 8 and 202 Programs

The City shall continue rental assistance housing programs to lower-income households, including ongoing participation with the Los Angeles County Housing Department Administered Section 8 and Section 202 programs. Programs to include use of housing vouchers.

Responsible Agency: Lawndale Department of Community Development

Funding: HCD Section 8 and 202 Funds

Schedule: 32 Units by 1994

3.2. Mortgage Revenue Bonds:

Research the availability of mortgage revenue bonds, as provided for in AB1355, that can be used to construct affordable housing for moderate income households. Should mortgage revenue bonds be utilized for this purpose, City administrative costs are to be covered by bonds. Bond program would also be applicable towards affordable multi-family rental units, as provided for in AB665. AB1355 allows cities to issue mortgage bonds for the construction of owner occupied single-family units or for rehabilitation of existing units. (SB99 enables redevelopment agencies to issue mortgage revenue bonds for the same purpose).

Responsible Agency: Lawndale Department of Community Development

Funding: Bond Issue

Schedule: 80 Units by 1994

3.3. Inclusionary Housing

The City shall encourage private sector involvement in State mortgage revenue bond programs, as administered by the California Housing Finance Agency, by making program financing available for housing projects that provide at least 20% of the units to lower income households. This would be applicable to rental or "for sale" projects, with "for sale" projects receiving preference.

Responsible Agency: Lawndale Department of Community Development

Funding: State Mortgage Revenue Bonds

Schedule: 40 Units in 1992 and 1993 - 80 Units Total by 1994

3.4. New Housing Funds

The City shall monitor regional, State and Federal housing legislation and funding allocations for new subsidy and assistance programs. Once identified, these programs will be evaluated for their applicability to Lawndale.

Responsible Agency: Lawndale Department of Community Development
Funding: No Direct Funding Required
Schedule: Ongoing

3.5. Redevelopment Housing Program

Utilize Redevelopment 20 percent set aside funds for the revision of low and moderate income housing, as they become available.

Responsible Agency: Lawndale Department of Community Development
Funding: Redevelopment
Schedule: 100 Units by 1994

4. Housing Preservation and Infrastructure

4.1. Infrastructure Improvement Program

Monitor both publicly and privately funded infrastructure improvements, including sewer, water, streets and other services, to ensure that they provide adequate service levels for existing and proposed housing units. Identify areas of the City where additional infrastructure is needed and pursue funding through available financing mechanisms.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund and Other Sources
Schedule: Annual Review

4.2. Housing Rehabilitation Program

Establish and maintain a City housing rehabilitation program utilizing City allocated funding and programs in order to upgrade existing owner occupied and rental housing stock.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund
Schedule: 100 Units by 1994

4.3. Renovation/Rehabilitation Resources Program

Produce a public information guidebook about available services for renovation and improvement of existing housing stock. Develop housing rehabilitation programs for both owner-occupied and renter-occupied units. These programs are intended to identify available funds such as low interest loans, Marks-Foran bonds, tax-exempt revenue bonds, and State rehabilitation funds for financing rehabilitation.

Responsible Agency: Lawndale Department of Community Development
Funding: General Fund and Other Sources
Schedule: 60 Units by 1994

4.4. Significant Structures Program

Conduct a historical and architectural survey of the City. The completed survey can then be used to determine specific buildings which shall become eligible for local landmark designation and to develop an ordinance to aid in their protection. The purpose of this program is to preserve those structures which are either architecturally significant or historically important, or both, in order to give the community a sense of history, identity and variety.

Responsible Agency: Lawndale Department of Community Development

Funding: General Fund

Schedule: Complete Survey by January 1993

4.5. Housing Replacement Program

Encourage the removal and replacement of substandard units which cannot be rehabilitated. Allow replacement and removal under the following conditions: adequate relocation provisions for the tenants have been made; and, there is adequate replacement stock for dwelling units occupied by persons and families of low and moderate income.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Ongoing

**5. Housing
Cooperation and
Coordination****5.1. Agency Liaison Program**

Maintain a liaison with surrounding cities, the County of Los Angeles, and other local, regional, State and Federal agencies with housing-related responsibilities.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Ongoing

5.2. Multi-Agency Organization Program

Study the feasibility of a joint or multi-agency organization and/or program to address area and local housing needs, i.e., jobs/housing balance conditions.

Responsible Agency: Lawndale Department of Community Development

Funding: General Fund

Schedule: Review Feasibility by 1993

6. Energy and Resources Conservation

6.1. Energy Conservation Reduction Program

Adopt and enforce building codes that minimize or eliminate unnecessary resource and energy consumption.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: End of 1992

6.2. Building Site and Design Program

The City shall develop building site and design standards that conserve energy and natural resources.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: End of 1992

6.3. New Energy Conservation Program

Periodically review City building codes to make sure they are kept current with regard to new energy conservation requirements.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Ongoing

6.4. Public Information Program

Establish and disseminate information which assists the public in identifying energy conserving techniques and methods available for retrofitting or constructing home improvements.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: Ongoing

6.5. Architectural Standards Program

Investigate and implement architectural standards for the integration of alternative energy technologies for existing and new home construction.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: End of 1992

6.6. Water Conservation Program

- Develop and implement a water conservation offset program designed to upgrade and/or retrofit existing housing units with water conserving devices.

Responsible Agency: Lawndale Department of Community Development

Funding: No Direct Funding Required

Schedule: End of 1992

Implementation Program Analysis

Table 20 represents the distribution of units for the identified housing implementation programs

Housing Programs Unit Distribution ¹			
Implementation Program No.	Income Level		
	# Units Very Low	# Units Low	# Units Moderate
1.3	45	55	—
1.6	50	—	—
2.5	—	35	45
3.1	16	16	—
3.2	—	—	80
3.3	60	20	—
3.5	40	60	—
4.2	20	40	40
4.3	—	20	43
Totals	231	246	208

¹High income housing units are not identified since the provision of these units occur through typical market functions.

Housing Programs Unit Distribution

table 20

ECONOMIC ELEMENT

II. COMMUNITY DEVELOPMENT

5. Economic Development Element

Introduction

Overview

The Economic Development Element of Lawndale's General Plan is concerned with the economic health of commercial and industrial uses in the City. It focuses on the enhancement of the City's business climate and tax base and on the economical provision of public services. Economic development goals and policies direct City activities towards maximizing the City's economic development potential.

Authority

The Economic Development Element is an optional element in Lawndale's General Plan. Government Code Section 65303 enables cities to adopt optional general plan elements. Lawndale elected to include an Economic Development Element because it focuses on issues significant to Lawndale's future that are not addressed elsewhere. The Economic Development Element has been reviewed for adequacy of data and internal consistency with other general plan elements.

Organization

The Economic Development Element begins with a discussion of the conditions currently existing in Lawndale. This includes an assessment of Lawndale's office, retail, industrial, and hotel real estate markets, economic base, business climate, economic functions, and the City's financial condition. The Element continues with a presentation of Lawndale's economic development goals and policies and concludes with Lawndale's implementation programs.

Assessment

Lawndale is part of a land use transition zone from the more industrially-oriented interior communities of the Los Angeles South Bay to the more residentially-oriented coastal communities. Lawndale is also part of a socioeconomic transition zone in terms of race and income levels. Communities in the South Bay's interior are more ethnically mixed than the coastal communities. Also, interior communities typically have more lower-income neighborhoods than the more affluent coastal communities.

The City of Lawndale is urbanized, as are the surrounding communities of Hawthorne, Torrance, Gardena, El Segundo and Redondo Beach. Because very little developable land remains, redevelopment has become an important planning tool. Generally, redevelopment activities in the communities surrounding Lawndale have increased employment density as a result of the conversion of land from heavy industrial to light industrial uses. Population density has also increased as older single family detached homes are replaced by new townhouses, condominiums and apartments.

Real Estate Markets

Commercial and industrial development in the South Bay has spread northwards from the Ports of Long Beach and Los Angeles, southward from Downtown Los Angeles and interior industrial areas, and from Los Angeles International Airport. Retail development in the South Bay includes some of the largest super-regional malls in all of Los Angeles County, as well as smaller strip, neighborhood and community centers. Hotel facilities in the South Bay were initially developed near the airport and along the ocean. More recently, hotels designed for business travellers have been constructed near large office/industrial developments.

In addition to its significant concentrations of office and industrial buildings, the South Bay is a major residential market characterized by low density housing. The beach communities, including Manhattan Beach, Hermosa Beach, and Redondo Beach, together with the Palos Verdes Peninsula are among the most sought-after residential neighborhoods in the Los Angeles area.

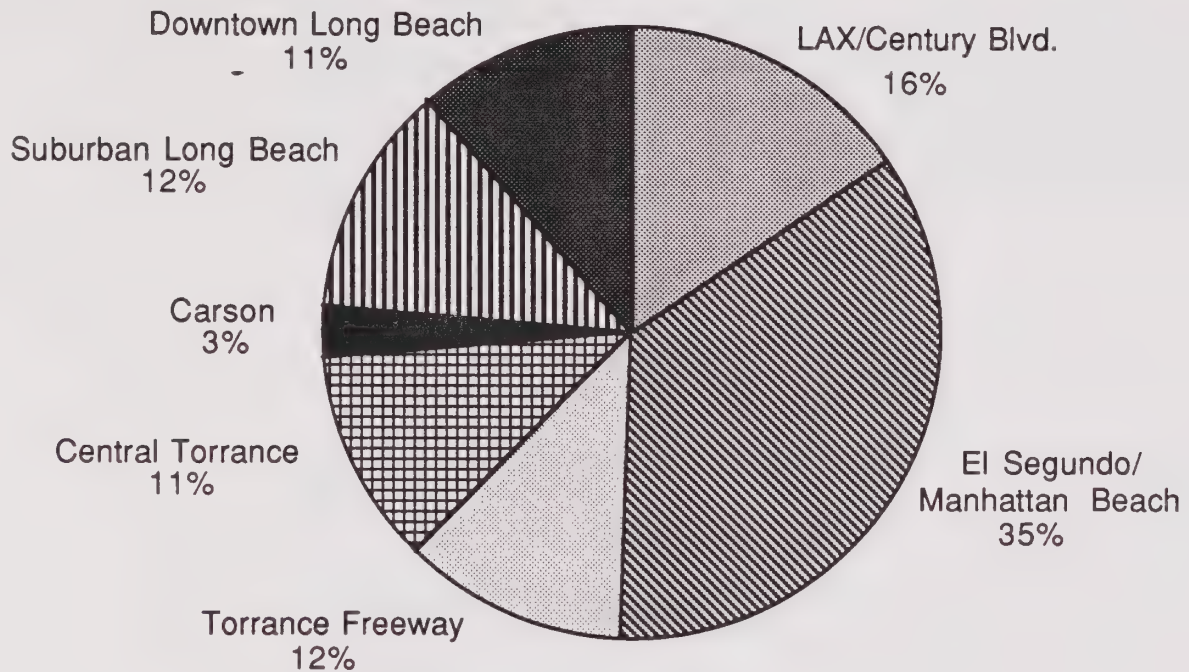
Office Market

The South Bay office market has grown rapidly since 1980. Until recently, the principal office tenants were aerospace and defense companies such as Hughes, TRW, and Northrup. However, South Bay aerospace firms have suffered severe cutbacks in the past few years and building owners are currently seeking to diversity the area's tenant base.

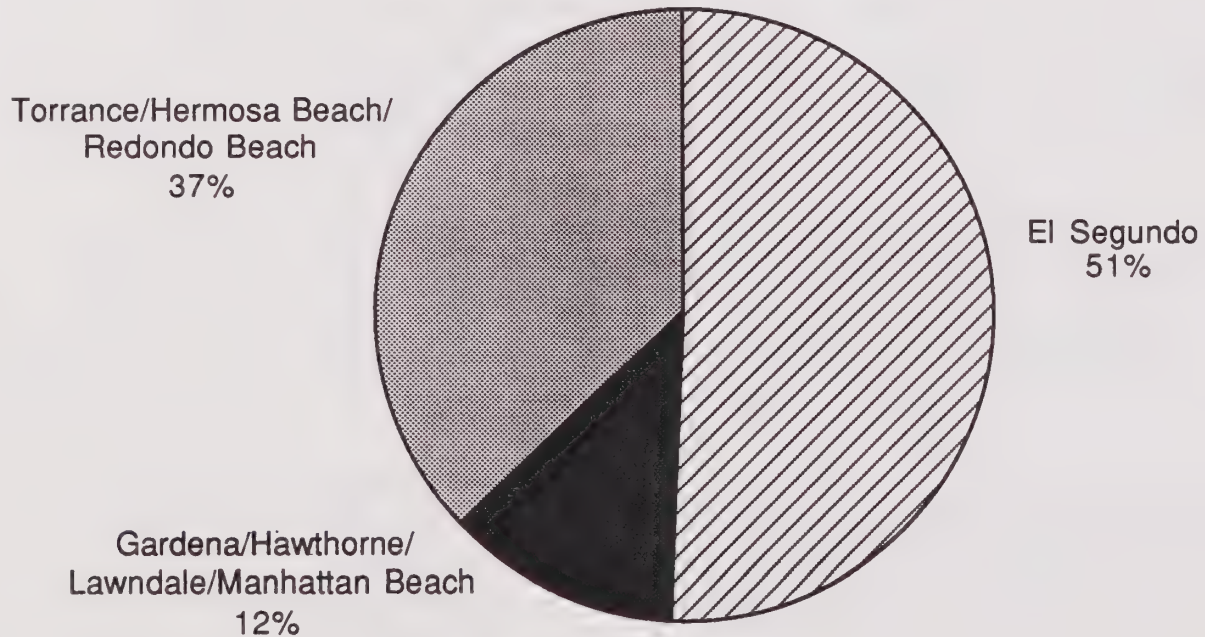
There are significant office markets both north and south of Lawndale in El Segundo and Torrance. The central areas of Hawthorne, Lawndale, Gardena and Manhattan Beach have relatively small office buildings scattered along principal arteries. Figure A summarizes the distribution of office inventory within the South Bay and within Lawndale's competitive market area.

Lawndale's dedicated office space constitutes less than one percent of the office inventory in Lawndale's competitive market area. There are currently three sizable office buildings in Lawndale: Baytower Corporate Center which has 75,000 square feet of office space; Lawndale Business Center with 39,000 square feet; and Lawndale Civic Plaza with 30,000 square feet.

South Bay Office Market



Lawndale Area Office Market



Source: Grubb & Ellis; 1990 BOMA; Coopers & Lybrand.

Regional Office Space Distributions

figure A

Retail Market

The South Bay contains four super regional shopping centers, three of which are located on Hawthorne Boulevard in close proximity to Lawndale. Table 1 presents a summary of the super regional shopping centers located in the South Bay. The Del Amo Fashion Center is the largest shopping center in Los Angeles County, while Carson Mall and Hawthorne Plaza rank 18th and 19th in the County, respectively.

Table 1
Super Regional Shopping Centers
Located in the South Bay

Center Name/Location	Year Built	Area (Sq. Ft.)
Del Amo Fashion Center Hawthorne Blvd. & Sepulveda	1961	2,650,000
Carson Mall Avalon Blvd. & Del Amo	1973	876,000
Hawthorne Plaza Hawthorne Blvd. & El Segundo	1977	834,772
South Bay Galleria	1985	945,000

Source: Coopers & Lybrand; National Research Bureau, 1990 Shopping Center Directory; Los Angeles Business Journal.

Commercial development comprises approximately 9 percent of Lawndale's land. This compares favorably to other California communities, which use, on average, 8.4 percent of their land for commercial development. Commercial development accounts for 15.4 percent of the City of Hawthorne's land and 9.1 percent of Gardena's land.

Industrial Market

The South Bay includes 10 of the 25 largest office and industrial parks in Los Angeles County. Indeed, a characteristic of newer industrial development is the combination of office with light industrial manufacturing and warehouse facilities.

There is a trend for labor intensive and manufacturing companies to relocate eastward toward the Inland Empire. This move takes advantage of lease rates and land values that are significantly lower than those in the South Bay. The Inland Empire, including eastern Los Angeles County as well as western

portions of San Bernardino and Riverside counties, is currently "housing rich" and "jobs poor". Local governments of Inland Empire communities compete among themselves to attract employers and may offer significant relocation incentives to businesses which relocate in their community.

At the same time that labor intensive businesses are moving out of the South Bay, growth in port-related activity has brought new companies into the South Bay. In addition, increased international air freight activity at Los Angeles International Airport (LAX) has increased the demand for warehouse and distribution space near the airport.

Lawndale's industrial base is primarily comprised of small manufacturing and distribution firms. In contrast to other South Bay communities, no major industrial facility is located in Lawndale. Accordingly, only 1 percent of the City's land is used for industrial development. By comparison, California cities dedicate an average of 9.3 percent of their land to industry. In the South Bay, the percentage of a city's land used for industrial development tends to be higher. For example, 21.1 percent of the land in the City of Hawthorne and 17.6 percent of the land in Gardena is used for industrial development.

Hotel Market

In 1990, the South Bay hotel market represented about 11 percent of the total supply of hotel rooms in Los Angeles County. However, growth of both supply and demand for the South Bay's hotel market is estimated to be about twice the rate for Los Angeles County. Table 2 compares total number of rooms and the growth of supply and demand for the South Bay and for Los Angeles County. Spillover demand from Los Angeles International Airport is one of the largest generators of hotel room nights in the South Bay Area.

Table 2
Comparison of South Bay and Los Angeles County
Hotel Market Characteristics for 1990

	Number of Hotel Rooms	Growth Rate of Supply	Growth Rate of Demand
South Bay	5,127	16.3%	10.0%
Los Angeles County	46,966	8.2%	4.8%

Note: The total room supply as well as growth rates are estimated.

Source: Pannell Kerr Forster; Coopers & Lybrand.

Lawndale currently has four hotels/motels, three of which are operated by nationally known franchises. A Comfort Inn, Best Western, Travelodge, and a Siesta Inn are located in Lawndale.

Economic Base

As shown in Figure B, the service and trade sectors account for about 65 percent of Lawndale's economic base. In 1987, it is estimated that there were approximately 5,853 jobs in the City of Lawndale.

- The largest single economic sector is services, which accounts for 32 percent of the Lawndale's jobs. This industry is primarily made up of owner occupied businesses such as business support services, amusements, health care, personal and repair services.
- The next largest sector is the combined sectors of retail and wholesale trade. Retail trade accounts for 17 percent of the City's economic base and wholesale trade accounts for 16 percent.
- The third largest sector is manufacturing, representing 17 percent of the jobs in Lawndale. Manufacturers are mainly small machine shops and metal fabricating enterprises.

Business Climate

Because Lawndale is part of the South Bay, it shares the general strengths of this area as a business location. However, there are differences. An assessment of Lawndale's business climate relative to the South Bay serves as a baseline from which to measure economic development potential.

Access to Markets

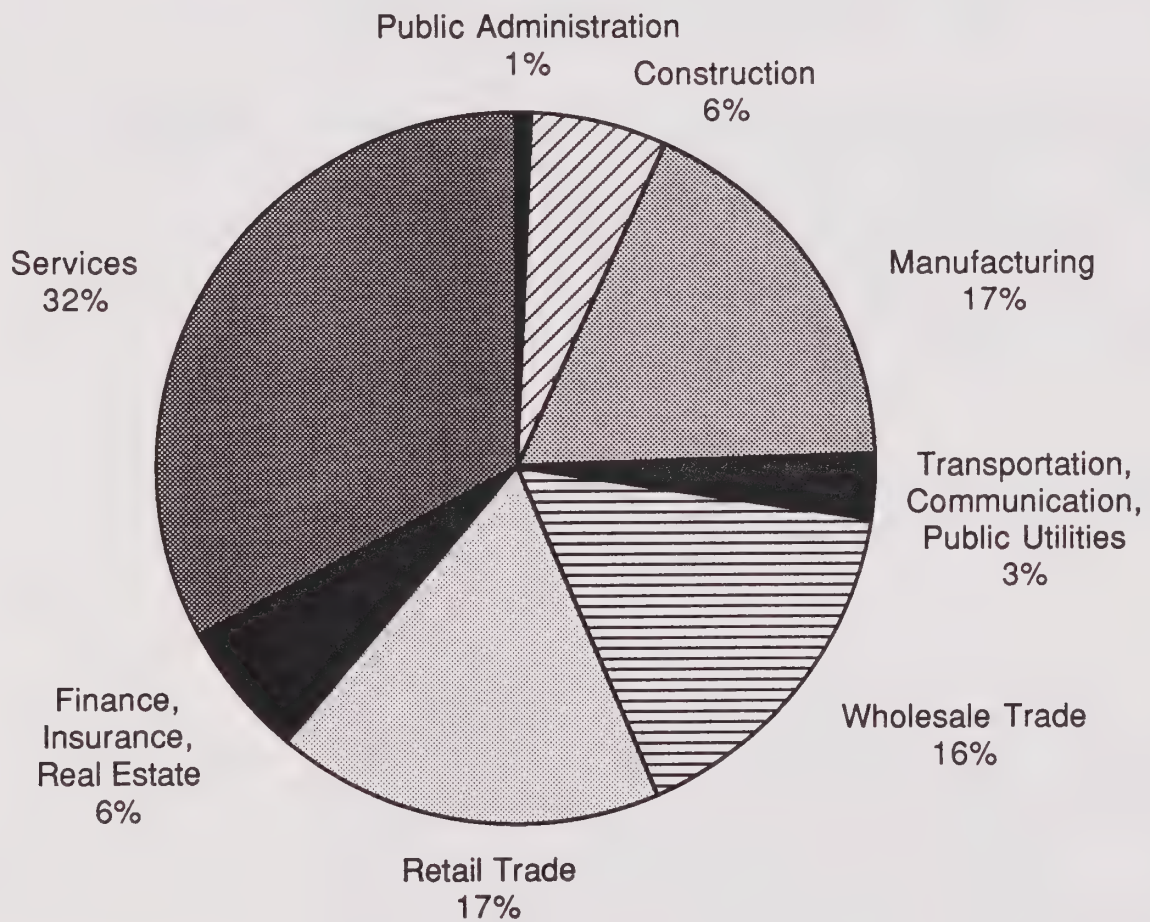
Lawndale is centrally located within the South Bay with excellent access to employment nodes in El Segundo, Torrance, at LAX and the Long Beach ports. Overall transportation access is good, however transportation by truck into and out of Lawndale is difficult because vehicles must travel on community arterials to get to interior sites.

Access to Resources

Firms locating in Lawndale could easily draw from the very large labor pool in surrounding communities. Business support services are limited in Lawndale, but until this sector of Lawndale's economic base matures, the firms located in Lawndale can draw from services offered in surrounding communities.

Land and Building Availability

Because Lawndale is primarily a residential community, commercial and industrial space is limited, though there are a few developable, vacant parcels.



Source: Donnelley Marketing Information Services, Market Profile Analysis, 1987.

City Of Lawndale Economic Base

figure B

Quality of Life Factors

Lawndale is predominantly a single-family residential community with close proximity to varied cultural and recreational activities.

It is important to remember that Lawndale has historically grown because of population, rather than employment growth. Aggressive business attraction has not been a dominant community development goal, and consequently, its economy is less developed than that of other, more industrialized South Bay areas. Maintaining the City's residential climate has been a higher priority.

Economic Functions

Lawndale is led by population rather than employment growth. A convenient measure of economic self-sufficiency is the ratio between people and jobs. Metro-wide, there are 2.09 persons per job in greater Los Angeles. In Lawndale, the corresponding ratio is 4.34. This indicates that significant out-commuting occurs. Recent growth in Lawndale's population-serving industries confirms that a substantial part of the City's employment growth has been led by population growth.

In the future, the service industry is expected to account for the largest number of new employment opportunities. Outlooks for other economic sectors are presented below:

Residential

Lawndale was originally developed as a pair of residential subdivisions. Its function in the South Bay is solidly established as a residential community. Table 3 displays historic population and the Southern California Association of Government's (SCAG) projected population growth for Lawndale and surrounding communities. Note that Lawndale has one of the highest projected population growth rates. As shown in the Land Use Element's buildout projections, Lawndale's population could exceed SCAG's projections, given the City's new land use plan. Population is projected to increase from its 1990 Census of 27,331 to 41,618. Housing units are projected to increase from 9,778 to 14,863 units.

Retail

Lawndale faces stiff competition from surrounding communities for retail development. Currently, Lawndale's main retail function is to serve its local population. A more diversified mix and modern retail centers might be supported by local population growth, especially by capturing out-of-city retail "leakages." Apparel, food, home furnishings and appliances are examples of items being purchased elsewhere. The City's potential for development to offset this leakage of retail dollars is rapidly decreasing as the South Bay becomes saturated with large-scale retail development.

Regional Population Trends

table 3

	Census 1970	Census 1980	Jan. 1, 1990	1990 Percent Distribution	Percent Change 1970-80	Percent Change 1980-90	SCAG Projections	
							2010	Percent Change 1990-2010
Los Angeles County	7,041,980	7,477,412	8,769,900	N/A	6.2%	17.3%	9,891,330	12.8%
South Bay	1,400,182	1,483,728	1,672,690	100.0%	6.0%	12.7%	1,728,867	3.4%
Regional Total	327,189	325,797	369,931	100.0%	-0.4%	13.5%	389,993	5.4%
Lawndale	24,825	23,460	27,331	7.4%	-5.5%	16.5%	31,988	17.0%
El Segundo	15,620	13,752	16,000	4.3%	-12.0%	16.3%	20,939	30.9%
Gardena	41,021	45,165	51,200	13.8%	10.1%	13.4%	56,568	10.5%
Hawthorne	53,304	56,437	67,800	18.3%	5.9%	20.1%	62,005	-8.5%
Redondo Beach	57,451	57,102	65,100	17.6%	-0.6%	14.0%	73,455	12.8%
Torrance	134,968	129,881	142,500	38.5%	-3.8%	9.7%	145,038	1.8%

Source: U.S. Census; California Department of Finance, Population Research Unit; Southern California Association of Governments.

Note: By 1990, the City of Hawthorne had surpassed its 2010 projection.

Office

Lawndale's office function is similar to its retail function—primarily providing the local population with business, personal and health services. Lawndale does not compete with the office space available in the larger office markets in El Segundo and Torrance. However, there may be modest opportunities for an expansion of Lawndale's population-serving office space as the City's population grows.

Industrial

Opportunities for expansion of Lawndale's economic function as an industrial area are related to light industrial and warehouse facilities. Growth projections among these types of industries and projections of increased international trade combine with Lawndale's proximity to international air and sea ports to make this type of development attractive.

City Financial Conditions

Lawndale's two largest sources of revenue are taxes and intergovernment transfers. Because the City collects no property tax, tax revenue is limited to collections on the sale of taxable goods and services, transient occupancy taxes collected on hotel room sales, and business license taxes. On the expenditure side, the City of Lawndale allocates nearly half of its annual budget to general government and public safety expenditures. This expenditure pattern is common among South Bay communities.

Lawndale's financial challenge is mixed. There is an imbalance between the City's revenue generating commercial/industrial sectors and its expenditure requiring residential base. Structural problems in the way Lawndale generates revenues and makes expenditures also exist. The City is residentially led, meaning that traditional sources of revenue are sales and property tax. Lawndale, however, is a zero property tax city and it experiences sales tax leakages to surrounding communities with more extensive and varied retail centers. These two facts limit the City's ability to generate revenue. Expenditures, however, are not limited by the City's status as a residential community. Residential development requires more in the way of expenditures on schools, health services, public safety, etc. than it generates in revenue.

Conclusions

Development trends suggest that Lawndale's function as a South Bay residential community will continue. In addition to its established residential base, projected population growth rates for Lawndale are among the highest estimated for South Bay communities between 1990 and 2010. The City's greatest challenge will be to deal with the financial problems that have resulted from a population-based economy.

- Land scarcity in Lawndale means that prices are high. In order to

generate positive cash flows, future residential and non-residential development will have to be higher density than current development.

- Los Angeles County is making investments in transportation infrastructure that will impact Lawndale. The Century Freeway is a major east/west commuter zone from inland residential centers to El Segundo/LAX employment centers. This freeway will reshape the northern boundary of the South Bay into higher-order freeway serving industries. For Lawndale, the freeway means access to employment nodes. Similarly, light-rail will make Lawndale more accessible to potential workers and more desirable for commuters.
- The planned expansions of air and sea ports are also important to Lawndale. With the expansion of these facilities, come increased activity in distribution-related enterprises in surrounding areas.
- The industrial evolution taking place in Southern California will affect Lawndale. The South Bay is being transformed as land-intensive firms relocate to more affordable locations on the urban fringe. In particular, the Inland Empire and the Lancaster/Palmdale area will likely experience population and employment growth from migrating businesses. Replacing these firms will be higher value added firms. For Lawndale, these are likely to be business and personal services firms and businesses related to trade and distribution.

Goals & Policies

Goal 1: Economic

To develop and maintain a diversified commercial and industrial economic base with uses that are appropriate to the Lawndale community and consistent with the City's environmental, aesthetic, and quality of life values and requirements.

Policies

Policy 1a

The City shall continue its policy of maintaining and preserving existing residential neighborhoods and discouraging unnecessary encroachment of commercial uses into such neighborhoods. No eminent domain would be utilized for private development or redevelopment.

Policy 1b

Make the retention and expansion of existing businesses the key element in Lawndale's overall economic development plan.

Policy 1c

Provide for and encourage the maintenance and revitalization of existing commercial and industrial areas.

Policy 1d

Encourage new, higher-intensity commercial and industrial activities in appropriate locations in the City.

Policy 1e

Encourage retail and service amenities that meet the needs of local residents and employees.

Policy 1f

Expand the City's commercial base beyond Hawthorne Boulevard.

Policy 1g

Increase entrepreneurial opportunities and create jobs by assisting in the retention, establishment and expansion of small businesses.

Policy 1h

Promote the City's central South Bay location and excellent regional access to attract new businesses.

Goal 2: Fiscal Position

To strengthen Lawndale's fiscal position by broadening the local tax base, maximizing revenue generation potential, and promoting the efficient and cost-effective provision of urban services.

Policies**Policy 2a**

Maintain and promote land uses that improve the City's tax base.

Policy 2b

Strive to balance the need for new or increased business tax and fees with the City's need to remain cost-competitive with surrounding cities for commercial and industrial development.

Policy 2c

Encourage new development that benefits the community more than the cost of providing the required urban services.

Policy 2d

Expenditures for infrastructure and the provision of urban services should be made in an economical manner to ensure efficient expenditures of public funds.

Goal 3: Business Climate

To provide a supportive and economically profitable environment as the foundation of a strong local business community.

Policies

Policy 3a

Develop a framework within which interested groups can work together on matters of common interest related to economic growth, its orderly management, and the resolution of attendant problems to improve the City's business climate.

Policy 3b

Take steps to create public and private sectors that support and promote Lawndale's business community.

Policy 3c

Correct infrastructure deficiencies that inhibit commercial and industrial economic development.

Implementation Programs

1: Economic Base

1.1 Economic Development Office

Investigate the possibility of creating an Economic Development Office within the Community Development Department or assign the responsibility of economic development activities to an individual within the Community Development Department. The Economic Development Office should serve as the designated interface between Lawndale's business community and the City.

1.2 Economic Development Liaison

Maintain a liaison with surrounding cities, the County of Los Angeles, as well as other regional, State, and Federal agencies with economic development responsibilities.

1.3 Business Survey

Undertake periodic business surveys to identify enterprises that are interested in staying and/or expanding in Lawndale. The survey should seek information on the characteristics that make Lawndale a desirable location and the type of job skills required by the business. The City could use this information to identify and attract appropriate businesses to Lawndale.

1.4 Grass Roots Revitalization

Build grass roots support among the business community for revitalizing and redeveloping commercial and industrial areas. Encourage property beautification efforts.

1.5 Hawthorne Boulevard Commercial Development

Utilize the Downtown Commercial designation, increased floor-to-area ratios, and identity-building design elements to increase commercial revitalization and economic growth along Hawthorne Boulevard.

1.6 Economic Development Funding

Collect and disseminate information on state, regional, and local funding programs for business retention, expansion and for the attraction of new businesses to Lawndale.

1.7 Business Loans

Establish a revolving loan program for new and expanding businesses. Monies repaid to the program would be re-allocated to other businesses meeting program requirements.

1.8 Business Incentives

Establish a procedure for evaluating potential business incentives that could be offered to businesses expanding and relocating in Lawndale.

1.9 Business and City Interaction

Create a mechanism through which members of Lawndale's business community can meet with elected officials and staff to discuss and resolve economic development issues.

Fiscal Position 2.1 Revenue Enhancement

Conduct a revenue enhancement study that considers taxes, assessments, licenses, permits, service charges, grants, and loans. Investigate programs that allow direct incremental tax revenue based on revitalized uses.

2.2 Financial Assistance

Monitor regional, state, and federal legislation and funding allocations for new subsidy and assistance programs. Once identified, these programs should be evaluated for their applicability to Lawndale and directed to the appropriate department or agency for implementation and administration.

2.3 Fiscal Impact Analysis

Establish and implement a procedure for assessing the fiscal costs and benefits of development projects by requiring a fiscal impact study for proposed development. The City should consider only those development projects for which the revenue potential is greater than the cost burden.

2.4 Service Standards

Conduct an internal review of public service standards and staffing levels to determine levels that are appropriate for the City of Lawndale. Service levels provided by the City could be analyzed relative to service levels in comparable cities. The City also should seek citizen input to determine the appropriate prioritization of City expenditures.

3: Business Climate

3.1 Community Profile

Create a "Community Profile" that includes information on demographics, employment, economic base, economic development programs, taxes, incentives, etc., that can be distributed to interested parties. Establish a procedure for reviewing and updating this document on an annual basis.

3.2 Networking Opportunities

Investigate ways to develop programs that offer Lawndale businesses networking opportunities through which they may build and maintain profitable business relationships. These programs should support and complement the activities of Lawndale's Chamber of Commerce and other business groups.

3.3 Training Programs

Ensure that new jobs are made available to Lawndale's unemployed and underemployed residents and that training and related programs support economic development efforts.

3.4 Streamline Process

Streamline the processes involved in expanding or locating a business in Lawndale, focusing on the processes in the Community Development Department, particularly land use and building permitting. Create a means of expediting development projects through the City's review processes.

3.5 Infrastructure Monitoring

Monitor both public and privately funded infrastructure improvements, including sewer, water, streets and other services, to ensure that they provide adequate service levels for existing and proposed businesses. Identify areas of the City where additional infrastructure is needed, pursue funding, and incorporate findings into a Capital Improvements Program.

III. RESOURCE MANAGEMENT

OPEN SPACE ELEMENT

III. RESOURCE MANAGEMENT

1. Open Space

Introduction

Overview

The overall quality of life in a community is enhanced by the provision of open space and recreational opportunities. As Lawndale's population continues to increase, the need for open space and recreational areas increases as well. Use of available and accessible open space and recreational areas within City boundaries is currently at capacity. Lawndale's urbanized character leaves limited open space and recreational opportunities for the future. Therefore, the preservation, enhancement, expansion and improvement of open space and recreational areas becomes a priority issue in the City.

Authority

The Lawndale Open Space Element maintains the overall quality of life for residents through the rational management of open space and recreational lands. City adoption of a comprehensive, long-term program ensures that open space and potential recreation areas are protected for the benefit of residents.

To this end, Government Code Section 65302 requires the preparation of an Open Space Element as part of the General Plan. Further defining the Element, Government Code Section 65560 states open space lands "are any parcel or area of land or water which is essentially unimproved and devoted to an open space use...which is designated on a local, regional or State open space plan as any of the following:

- Open space for the preservation of natural resources;
- Open space for the managed production of resources;
- Open space for outdoor recreation;
- Open space for public health and safety."

As part of the Open Space Element, Government Code Section 65564 requires an Action Program consisting of specific programs to implement the open space plan. Furthermore, the Open Space Element must be consistent with all other elements of the General Plan, with close relationships to the Land Use and Conservation Elements.

Organization

- This Open Space Element assesses current supply, documents accepted standards, establishes goals and policies for the improvement of open space opportunities and concludes with implementation programs. It is organized to represent the status of, and direction for, open space and recreational lands in Lawndale.

The Assessment section identifies and categorizes existing open space areas. Included in the assessment are the amounts and locations of City parklands, vacant lands, recreational facilities and regional facilities as well as existing development standards related to open space. Following the assessment, the Open Space Goals and Policies are presented. These goals and policies will guide and direct the City in its efforts to provide adequate and accessible open space and recreational opportunities for its population. The final section of this Element discusses implementation programs. These programs are designed to achieve the stated goals and policies.

Assessment

Overall Supply/ Programs

There are three types of open space and recreational areas/facilities in Lawndale:

- Parkland
- Vacant/Private Lands
- Community Recreation Facilities

Table 1 illustrates the total Open Space and Recreation Inventory in the City of Lawndale. As the table shows, a total of 39.27 acres are available for open space and recreational opportunities. Recreation programs are categorized as either City funded or user fee funded. These programs are detailed in Table 2.

Based on the National Recreation and Park Association's most commonly accepted ratio of desirable parkland area to population (2.5 acres per 1,000 persons), the existing City-wide supply falls approximately 29 acres short.

Parkland

There are two forms of parkland in Lawndale; parks that are City owned and parks that are contracted through a Joint Powers Agreement for City utilization. The City owned parks include the Hogan Tot Lot, a 6,000 square foot improved child play area located on West 167th Street, and the Community Garden, a 24,000 square foot "Pocket-Park" used for planting and cultivating plants, located on 160th Street, north of the 405 Freeway.

Open Space and Recreation Inventory	
Site	Acres
School Sites	
Rogers/Anderson	5.70
Jane Addams ¹	5.00
William Green ¹	4.00
Parks	
Hogan Tot-Lot	0.14
Community Garden	0.57
Vacant	
Public (Utility-Water Co.)	0.45
Private (78 lots)	9.11
Railroad Right-of-Way	11.04
Community Recreational Facilities²	
Prairie Avenue Community Center	0.40
Civic Center	2.80
Total	39.27

¹ The City is currently negotiating to renew Joint Powers Agreement.

² The Community Recreation Facilities are designated Public Facilities in the Land Use Plan that serve community recreational purposes.

Source: City of Lawndale Planning Department and The Lightfoot Planning Group 1990 Land Use Inventory.

Open Space and Recreation Inventory

table 1

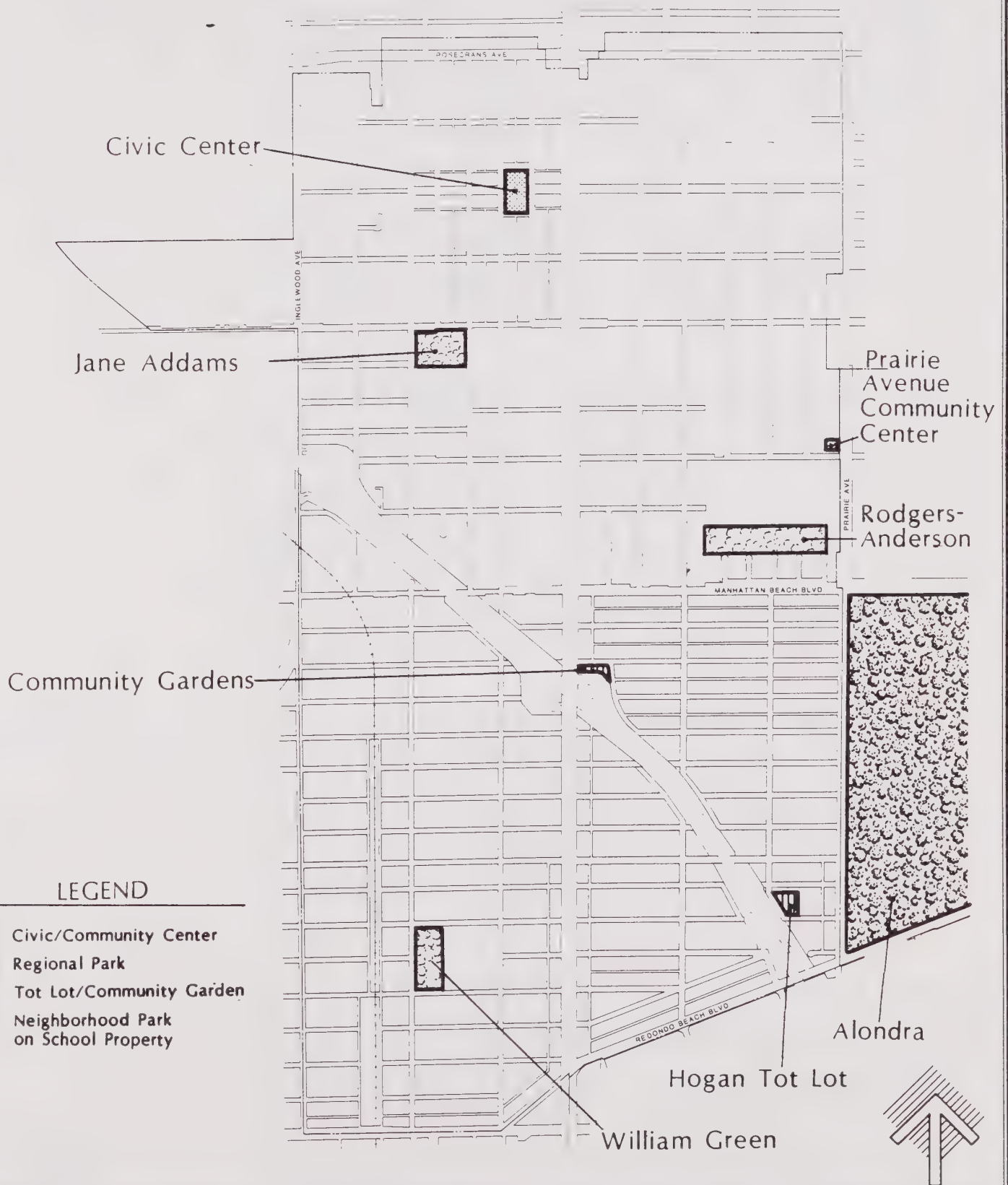
Funding Sources For Recreation Programs		
Program	City Funded	Participation Fees
1. Adult Softball League		•
2. Adult Softball Tournaments		•
3. Youth Sports Leagues		•
4. Youth Toy Loan	•	
5. Children's Arts and Crafts	•	
6. Teen Dances		•
7. Day Camps		•
8. Special Olympics	•	
9. Youth Gymnastics	•	
10. Golf Tournaments		•
11. Youth in Government Day	•	
12. Preschool classes		•
13. Mental Health Services	•	
14. Trips and Tours		•
15. Before and After School Child Care Program		•
16. Easter Program	•	
17. Halloween Program	•	
18. Fourth of July Program	•	
19. Bicycle Safety Program	•	
20. Bicycle Licensing Program		•
21. Adult Interest Classes		•
22. Recreation Brochure	•	
23. Youth Camp		•

Source: City of Lawndale Department of Parks and Recreation, January 25, 1990..

Funding Sources for Recreation Programs

table 2

CITY OF LAWNDALE GENERAL PLAN



Existing Open Space and Recreational Facilities

figure A

acres, have various shapes and range from 3,000 to 6,000 square feet in size. Table 4 details the distribution, zone designation and size for these vacant parcels. Figure B illustrates the location and distribution of the vacant parcels. The majority of the vacant lots are not maintained. Some have accumulated remnants of old cars, garbage, wood, and miscellaneous debris. Finally, many of the vacant parcels are constrained due to both size and accessibility.

The privately owned Atcheson, Topeka and Santa Fe Railroad (AT&SF) corridor, extending through the southwestern quadrant of the City, is included in the vacant land inventory. This corridor is presently undeveloped, except for the rail tracks. The corridor varies in width and the tracks are periodically utilized.

The City is presently evaluating the impacts of the proposed Coastal Corridor Rail transit Project. This study was prepared in May 1990, by the Los Angeles County Transportation Commission in cooperation with the Cities of Lawndale, Redondo Beach and Torrance. The study proposes to route a light-rail transit line within the median strip of Hawthorne Boulevard, south of the 405 Freeway. If plans to route the light rail line in this location are adopted, the abandonment of the existing corridor could provide Lawndale with an opportunity to develop a linear open space and recreation corridor. This area totals approximately 11 acres, making it the largest piece of contiguous vacant land in Lawndale.

Community Recreation Facilities

The City of Lawndale has two primary recreation facilities; the Prairie Avenue Community Center and the Civic Center. Combined, these two facilities provide 3.2 acres of recreational area. Through the City's Department of Recreation and Community Services, the Prairie Avenue Community Center, located at Prairie Avenue and 154th Street, provides events and services for all ages in the community. Senior Citizen services and events are also scheduled at the Prairie Avenue Community Center.

The Lawndale Civic Center is located at 14717 South Burin Avenue. The facility has two rooms that are available for group meetings and recreational programs similar to those provided at the Prairie Avenue Community Center. There is also small lawn areas immediately adjacent to both facilities which may be utilized for outdoor programs.

Development Standards

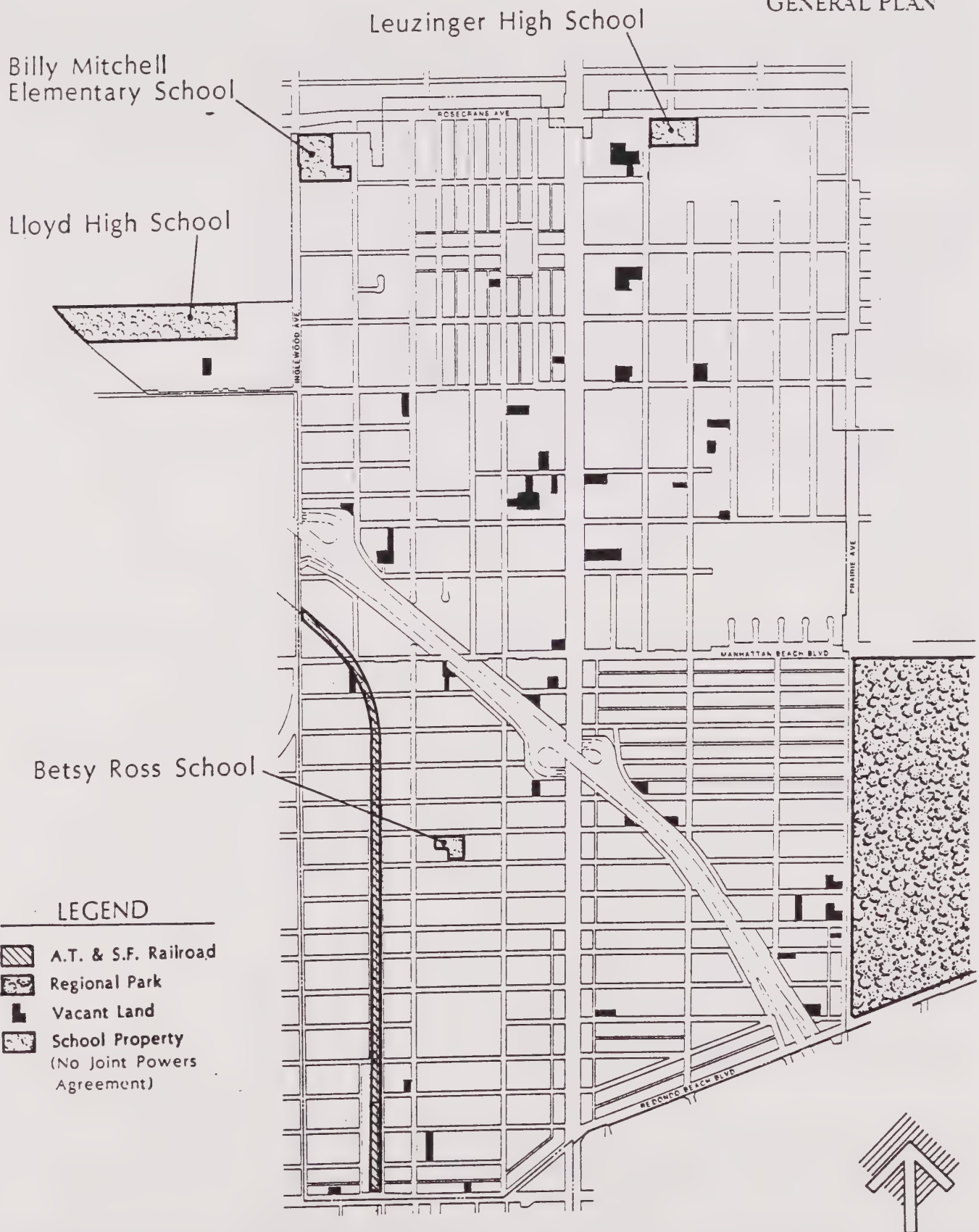
Although not perceived as such, the majority of open space areas within a community consists of setbacks and required yard areas of new developments. Open space and recreation areas are required by zoning

Inventory of Private Vacant Lands									
Street Name	No. of Parcels	Total Acres per Zoning Designation							Total Acres
		R1	R2	R3	R4	C3	C4	M1	
Artesia Blvd.	2					0.19			0.19
Hawthorne Blvd.	11					1.63			1.63
Prairie Avenue	5	0.02			0.20	0.05			0.27
Mansel Avenue	4	0.14	0.07						0.21
Grevillea Avenue	4	0.20		0.45				0.43	1.08
Manhattan Beach Blvd.	6	0.12		0.14				0.60	0.86
Compton Avenue	5						0.21	0.85	1.06
Larch Avenue	7		0.39	0.15					0.54
Freeman Avenue	2		0.08						0.08
Sombra Avenue	1		0.08						0.08
Kingsdale Avenue	1			0.07					0.07
Eastwood Avenue	1		0.18						0.18
Firmona Avenue	1		0.01						0.01
145th	1			0.07					0.07
149th	1		0.07						0.07
152th	1			0.05					0.05
153rd	4			0.11		0.11	0.18	0.09	0.49
154th	4		0.28						0.28
159th	3		0.20	0.13		0.03			0.36
161st	1		0.12						0.12
162nd	3		0.24						0.24
163rd	2		0.22						0.22
164th	1		0.05						0.05
165th	2		0.23						0.23
166th	1		0.12						0.12
167th	1		0.23						0.23
170th	1		0.06						0.06
171st	1		0.13						0.13
173rd	1			0.13					0.13
TOTALS	78	0.48	2.76	1.30	0.20	2.01	0.39	1.97	9.11

Source: The Lightfoot Planning Group 1990 Land Use Inventory.

Inventory of Private Vacant Lands

table 4



Source: The Lightfoot Planning Group 1990 Land Use Inventory

Open Space/Recreational Area Opportunities

figure B

and subdivision standards. Zoning ordinance standards specify open space areas typically called setbacks, that function as buffers between land uses, promote safety and reduce visual impacts. Open space may also include recreational facilities within residential developments or facilities incorporated into the workplace.

Setback and common area requirements are the most common form of private open space. Single-family residential units typically utilize standard front, side and rear yard setbacks as open space while multi-family projects use common areas and standard setbacks. Private recreation required as part of multi-family projects in the R-2 zone are required to be "unobstructed from the ground to the sky," while the common recreation areas for condominiums not in the R-2 do not have this provision. All multi-family projects are permitted to encroach into the setbacks. Table 5 details Zoning Ordinance residential open space requirements. These requirements become important because much of the future open space and recreational areas in Lawndale will be provided through private developments, both residential and non-residential.

Regional Facilities

A variety of regional recreation and open space opportunities and facilities are available to residents of Lawndale. The closest is Alondra Park, located adjacent to the southeastern City boundary. The park is situated within the adjoining unincorporated area of Los Angeles County, east of Prairie Avenue and is operated by the County. The 200-acre park offers a variety of active and passive types of open space and recreation. Facilities include: Baseball and softball fields, a gymnasium, children's play equipment, a recreation club house, a swimming area and a 155-acre golf course.

In addition to Alondra Park, there is a range of open space and recreation opportunities within the greater Los Angeles County region. Figure 3 shows locations of regional opportunities such as museums and beaches. Other recreational uses located near Lawndale include miniature golf, water slides, and various commercial facilities such as bowling alleys.

Given the City-wide population of 27,331, the current ratio of parkland to population in Lawndale is equal to approximately 0.6 acres per 1,000 persons. In relation to the National Recreation and Park Association (NRPA) accepted standard of 2.5 acres per 1,000 population, the City is over 29 acres deficient.

Residential Open Space							
Open Space Policy	Zoning Classification				Additional OS Policy		
	R1	R2	R3	R4	PRD Overlay	Condo	Apt
Allowable Uses							
Public and Associated Uses	•	•	•	•	•		
Development Regulations							
Required Setbacks:							
10' to 20' minimum front yard	•	•	•	•			
3' to 5' minimum side yard	•	•	•	•			
5' to 7' rear yard	•	•	•	•			
Required Common/ Private Recreation Space							
private recreation (open to sky): 200 sq. ft./unit		•					
common recreation space: 10% lot area			•	•		•	•
landscaped: 5% lot area				•			
common recreation space: 30% lot area					•		
private recreation space: 120 sq. ft./unit		•	•	•		•	•

Source: Lawndale Zoning Ordinance, 1985.

Residential Open Space Requirements

table 5

LEGEND

- 1 Fisherman's Village-Marina del Rey
- 2 Ports O'call Village-San Pedro
- 3 Queen's Wharf-Long Beach
- 4 Redondo Beach Marina
- 5 Banning Residence Museum-Wilmington
- 6 Cabrillo Marine Museum-San Pedro
- 7 Long Beach Children's Museum
- 8 Long Beach Museum of Art
- 9 Long Beach Firefighter's Museum
- 10 Los Angeles County Museum of Natural History-L.A.
- 11 The Los Angeles Forum-Inglewood
- 12 Hollywood Park Racetrack-Inglewood
- 13 Manhattan Beach
- 14 Hermosa Beach
- 15 Redondo Beach
- 16 Pier J/Queen Mary-Long Beach
- 17 Catalina Island Departure Point
- 18 South Coast Botanic Garden-Palos Verdes
- 19 Anderson Park-Redondo Beach
- 20 Perry Park-Redondo Beach
- 21 Bodger Park-Hawthorne
- 22 Alondra Park



Regional Open Space and Recreational Facilities

figure C

- Lawndale, however, is in a location that may not be appropriate to utilize the NRPA standard. Since the City is only 1,241 acres in size, factors such as regional opportunities should be taken into account. The location of Alondra Park and other regional facilities do provide open space and recreational opportunities that are not included in the calculation to determine deficiencies in City facilities.

Goals and Policies

In order to direct the preservation, enhancement and improvement of open space and recreational opportunities within the City of Lawndale, the following goals and policies are provided.

Goal 1. Open Space

It is the City of Lawndale's goal to provide sufficient and accessible open space areas for all existing and future residents.

Policy 1a

Develop and adopt a comprehensive open space funding program contingent on new development for acquisition and maintenance of open space and recreational facilities.

Policy 1b

Continue and pursue additional Joint Powers Agreements with Lawndale School District for Park uses at School sites.

Policy 1c

Should the Lawndale School District propose to sell or develop an existing facility, pursue a purchase from, or joint venture with, the District to ensure long-term open space availability.

Policy 1d

Encourage the creation of open space areas (i.e., common areas, courtyards) within non-residential developments.

Policy 1e

For residential developments, in order to maximize usable open space, the City shall discourage structural projections into required setback open space areas.

Policy 1f

Prepare and adopt a Master Street Tree program providing street trees in all development projects.

Policy 1g

Review new development to ensure existing significant trees and vegetation on adjacent parcels will not be adversely affected due to interference with sunlight and drainage patterns.

**Goal 2.
Recreation**

It is the intent of the City of Lawndale to provide recreational facilities and programs for all segments of the community.

Policy 2a

Encourage and promote use of the Civic Center and Prairie Avenue Community Center facilities for recreational activities and programs provided by the City.

Policy 2b

Study the feasibility of annexing all, or portions, of Alondra Park to increase City-wide recreational opportunities.

Policy 2c

Evaluate all vacant parcels within the City for their ability to accommodate active recreational uses (i.e., basketball, volleyball, etc.).

Policy 2d

Encourage new development, through development incentives, to provide on-site recreational facilities for employees and residents.

Policy 2e

Encourage multi-family residential developments to provide active open space and recreational uses which are maintained by Homeowners Associations.

**Goal 3.
Trails**

It is the City of Lawndale's goal to provide safe and accessible riding and walking trails for the City's residents.

Policy 3a

Pursue the feasibility of acquisition and development of a trail corridor along the AT & SF railroad right-of-way.

Policy 3b

Pursue funding and development of City-wide pedestrian/bicycle trails to integrate with the Los Angeles County Regional Trail System.

Policy 3c

- Where feasible, improve and promote the establishment of a fitness trail utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

Implementation Programs**1. Open Space Programs****1.1. Park Master Plan**

Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

1.2. Small Park Development Program

Utilizing Park Fee Ordinance revenues, the City shall pursue development of pocket parks and/or tot lots on underutilized and vacant parcels.

1.3. Naylor Act Rights Program

The City shall pursue the acquisition of surplus school sites utilizing its Naylor Act Rights, when the sites become available.

1.4. Zoning Ordinance Revisions

The City shall revise the City's Zoning Ordinance to require open space and plazas within multi-family residential and non-residential developments. Revision also to include language requiring street tree plantings and provisions for maintaining existing trees on sites.

1.5. Open Space Evaluation Program

The City shall develop an evaluation system for prioritizing open space and recreational opportunities as well as future investments using the following criteria:

Benefits:

- Increased Land Values of Adjacent Properties
- Recreation User Satisfaction
- Savings in Transportation Costs
- Improvement in Mental and Physical Health
- Reduction on Levels of Air, Noise or Water Pollution
- Increased Recreation Opportunities for the Disadvantaged
- Retention of Options for Future Growth

Costs:

- • Land Acquisition
- Development of Recreation Facilities
- Maintenance and Operation of Recreation Facilities
- Impacts on Tax Base
- Impacts on Housing Market

These costs and benefits must be carefully weighed when trying to provide adequate open space and recreation areas.

2. Recreation Programs

2.1. Civic Recreation Program

The City shall continue to fund recreational programs and advertise on a citywide basis these programs available for the citizenry. Advertisement should be in public places and in various local periodicals.

2.2. Recreational Use Program

In conjunction with the Small Park Development Program, the City shall develop recreational uses such as basketball courts, volleyball, tennis, etc. on vacant parcels.

2.3. Zoning Ordinance Revisions

The City shall revise the Zoning Ordinance to require active recreational amenities in multi-family residential and non-residential developments.

2.4. Commercial Recreation Program

The City may encourage commercial recreational uses to locate in Lawndale. Incentives such as advertising on City owned bulletin boards, stream line processing and zoning ordinance variances may be utilized.

2.5. Alondra Park

The City may pursue the annexation of Alondra Park by preparing a feasibility study to analyze the impacts of such action. If favorable, the City shall make application with SCAG to annex a portion, or all of the park, to increase recreational opportunities in Lawndale.

3. Trails Programs

3.1. Master Trails Plan

The City shall develop and adopt a Master Trails Plan delineating potential and proposed trail routes throughout the City. This plan should be prepared in conjunction with regional trail systems and incorporate them where appropriate.

3.2. Fitness Trail Program

- The City shall develop and adopt a city-wide Fitness Trail fee charged to new residential developments. This program will include the utilization of the AT & SF railroad right-of-way, if it becomes available to the City.

CONSERVATION ELEMENT

III. RESOURCE MANAGEMENT

2. Conservation Element

Introduction

Overview

Increasing public concern for environmental quality has heightened the importance of, and necessity for, the Conservation Element. As growth and urbanization continue, the City of Lawndale is confronted with difficult environmental issues such as the provision and maintenance of clean air and water, and the prevention and control of pollution.

Authority

In 1970, state law passed which required new General Plan elements, in addition to Land Use and Transportation, to be incorporated into the General Plan document. Among them is Government Code Section 65302(d) which requires the incorporation of a Conservation Element. In addition, that same year witnessed the passage of the California Environmental Quality Act which mandates the assessment of potential, and mitigation of significant impacts to the environment. Therefore, in order to meet state requirements, increase environmental awareness, and evaluate natural resources, the City of Lawndale will be addressing Conservation issues as part of its General Plan. Additionally, the Conservation Element is intended to:

- promote the protection, maintenance, and use of the state's natural resources;
- prevent the wasteful exploitation, destruction, and neglect of the state's natural resources; and
- recognize that natural resources must be maintained for their ecological value as well as for their direct benefits to the public.

Organization

This element provides an assessment for conservation, development, and utilization of the following resources:

- Mineral Resources
- Wildlife
- Water
- Air
- Energy

- Historical and cultural structures
- Solid Waste

Assessment of the existing conditions provides the necessary criteria for formulation of goals and policies. Therefore, following the summary and analysis of Lawndale's resources will be a statement of the goals and policies as well as the implementation programs necessary to achieve those goals.

The Conservation Element is intended to provide guidance to the City Council and other decision-making groups in preserving, enhancing, and creating resource conservation opportunities throughout the City.

Assessment

The City of Lawndale is a highly urbanized area that functions primarily as a bedroom community within the surrounding Los Angeles South Bay region. Because of the City's high degree of urbanization, there are few natural resources remaining.

Mineral Resources

There is one mineral resource that underlies the City of Lawndale: the Lawndale Oil Field. The field, roughly bounded by 135th Street on the North, Hawthorne Boulevard on the east, Marine Avenue on the south, and extending approximately 1/2 mile west of Inglewood Avenue, was semi-productive during the 1920's and 1930's. During that time, approximately 25 oil wells were drilled in Lawndale, mostly near the intersection of Rosecrans and Inglewood Avenues. Today, all of the wells within the City limits have been capped and are no longer active. The field is not depleted. Approximately 50-60% of the oil is still present in the field. The possibility of re-opening the field, in the event of an energy-related crisis exists. The existing zoning classifications, however, no longer allow for this type of land use. Additionally, any drilling would most likely occur outside the City limits in areas where higher productivity could be achieved.

Wildlife

Due to the minimal amounts of natural vegetation and limited domestic landscaping, no significant species of wildlife have been identified. Existing wildlife, such as sea gulls, ground squirrels, and lizards, can readily adapt to changes in the urban environment and do not have to compete with man for survival. Therefore, their displacement is not a significant conservation issue in Lawndale.

Water

Water is necessary for sustainment of any community. The natural water systems in Lawndale, such as surface water and ground water,

induce and sustain vegetative growth and animal habitat and provide for long term storage and use for the community. The City, therefore, recognizes water to be an invaluable resource to be conserved.

Drainage

There are no natural waterways or large bodies of water located within the City limits. In terms of surface water, Lawndale's resource lies in the runoff that occurs as a result of the high level of urban development. During heavy rains, some localized street flooding occurs in various areas of the City.

Groundwater

Groundwater resources in Lawndale are being depleted at rates faster than they are being replaced. The urban environment prevents ground water replenishment by diverting surface drainage through the streets directly into the County's subsurface drainage system. The inability to efficiently replenish ground water resources along with the climatic conditions of the region have led the City to grow and depend upon imported water to meet the majority of its domestic water needs. The City is serviced by the Southern California Water Company which obtains its water from the Metropolitan Water District and from groundwater wells.

Water Conservation

In recognition that water is a limited invaluable resource, the City has adopted a Water Conservation and Drought Response Plan. The Plan is intended to facilitate water conservation practices as well as to help cope with reduced water supplies during drought conditions. Additional actions taken to deal with the limited supply of water include reclamation projects. The proposed West Basin Water Reclamation Program is one such project that would reclaim 62.5 million gallons per day (70,000 Acre Feet Per Year) of secondary effluent from the Hyperion Treatment Plant to be used for irrigation and industrial purposes, as well as to be injected into the water table to prevent salt water intrusion. The project is expected to decrease the demand for potable water, decrease the dependency on outside services for water, and provide the area with a continuous dependable source of water.

Air Quality

Air quality is a regional issue, and therefore must be addressed by all local governments as well as regional agencies. Intergovernmental coordination is the key to dealing with air quality.

Air quality is affected by urban developments (stationary sources), and motor vehicles (mobile sources). Hence, increases in population and

urbanization affect air quality. The California Air Resources Board (CARB), and South Coast Air Quality Management District (SCAQMD) operate 32 ambient air quality monitoring stations throughout the South Coast Air Basin. The closest station to the City of Lawndale is located in Hawthorne. According to their figures, the entire South Coast Air Basin has not met state and federal standards for O₃, CO, NO₂, and PM₁₀. The Air Quality Management Plan in the Resource Management chapter of the General Plan has a more detailed discussion of pollutant emission trends in the Lawndale area.

Energy

All areas within the City have access to natural gas services from the Southern California Gas Company. At the present time, the Gas Company is not experiencing any difficulties in providing the services required to meet the demand that is generated by the City of Lawndale or its surrounding cities. Furthermore, the Gas company is prepared to expand their systems should the demand increase.

Southern California Edison supplies electricity to the City. The fees that customers must pay for energy is an important factor in the amount of energy that is consumed and points to the economic attractiveness of energy conservation and alternative source programs. According to the total 1989-1990 energy billed for the entire service area, which encompasses a fifty-thousand square mile area and includes the City of Lawndale, the top three demand generating uses are commercial, residential, and industrial, respectively.

Southern California Edison recognizes the need to conserve energy and currently implements a number of energy conservation programs that are designed to assist individual customers in their energy conservation efforts. Examples of existing programs include:

- Rebates for purchase and or use of energy efficient equipment and facilities;
- Free on-site energy consumption surveys;
- Experimental rates based on incentive programs; and
- New construction and structural modification incentive programs.

Opportunities for energy savings for the general public lie in reducing space heating and cooling loads in their homes. Strategies to accomplish this include the construction of energy-efficient homes. Examples of typical home energy conservation measures are as follows:

- Use of insulation in floors, walls, and ceilings to deter heat loss and heat gain;

- Insulated thermal windows, storm doors and sealed fireplace flues reduce interior energy loss and air infiltration;
- Use of light exterior house colors reduce solar heat gain; and
- Overhangs, trees, and shrubs can shade exposed southerly walls and windows from direct sun rays in the summertime.

See Figure A for further description of typical energy conservation strategies.

Historical/Cultural Resources

The City of Lawndale has a church and several private residences that are believed to be of local historic interest. See Figure B for a general description of the locations of historic structures in Lawndale. The First Congregational Church of Lawndale, located at 4521 W. 147th Street, was the first church to be located in Lawndale. The church was completed in 1906 and is believed to have been one of the first churches to be established in the entire Centinela Valley. The church still serves as a meeting place for civic groups and congregations. Many of the significant residential buildings were moved into Lawndale from other areas within the Los Angeles region. Many of these buildings are unknown and unrecognizable to the community because they are not located in one general area of the City, and many are concealed behind mature landscaping, or by remodeling that has "modernized" or significantly customized their appearance.

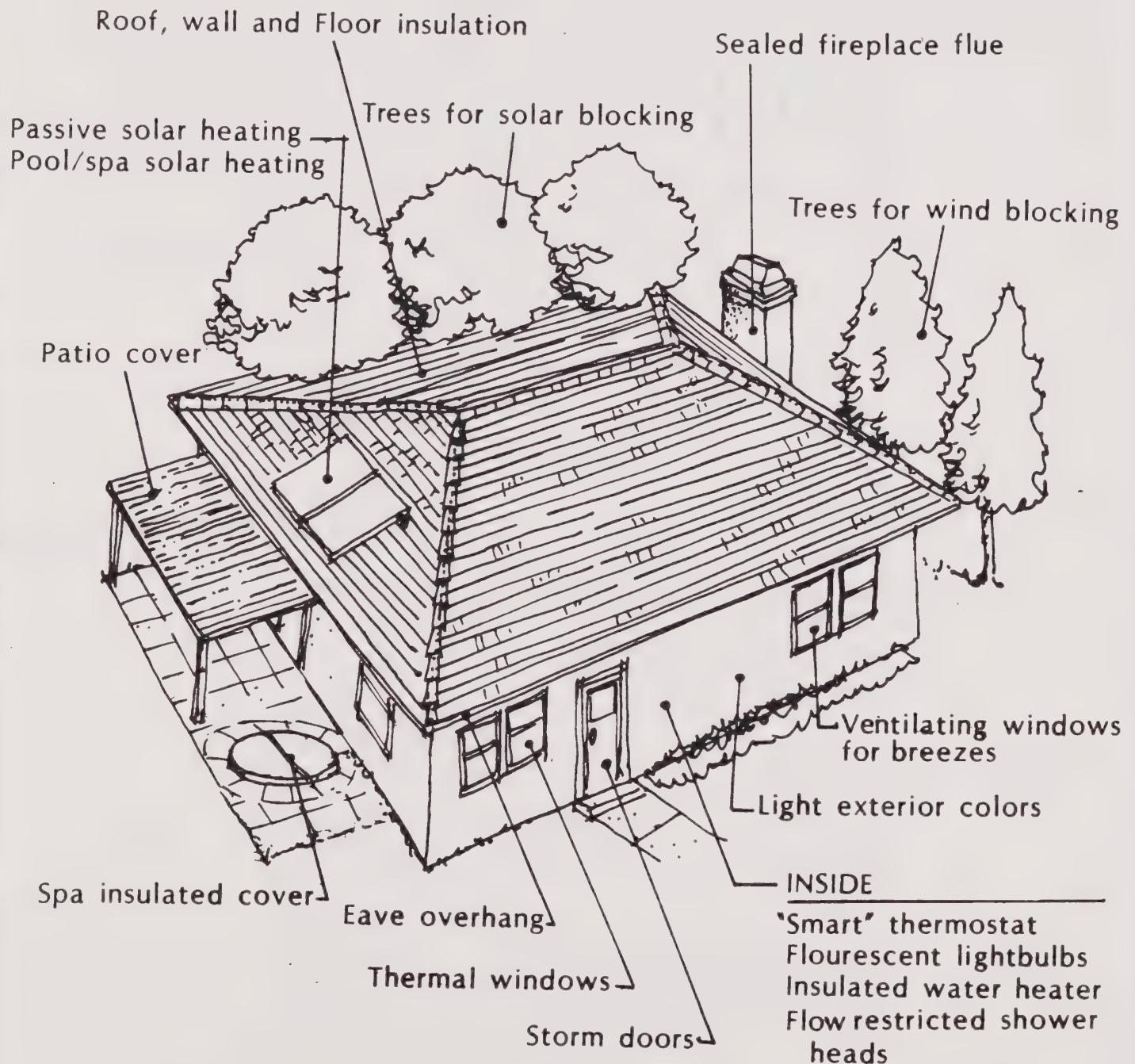
Solid Waste

Municipal Solid Waste is not, regarded to be a natural resource that requires conservation. However, its improper disposal and increasing quantities are serious environmental issues that can detrimentally affect many of the state's natural resources. Therefore, this element will address the solid waste issue as a means to promote conservation of previously discussed resources.

Assembly Bill 939:

The California Integrated Waste Management Act of 1989, Assembly Bill 939, states that the responsibility for solid waste management is a shared responsibility between the state and local governments. AB 939 requires local agencies to (a) promote source reduction, recycling, composting, environmentally safe transportation and land disposal, and (b) maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of.

The City of Lawndale does not have an integrated solid waste management plan at this time, and there are no city operated recycling facilities. The City does, however, contract for the pick-up and hauling of all



Source: The Lightfoot Planning Group

Typical Household Energy Conservation Techniques

figure A

First Congregational
Church of Lawndale

CITY OF LAWDALE
GENERAL PLAN



Source: The City of Lawndale, 1983



Local Historic Structures
figure B

residential solid waste to the nearest transfer station. Commercial and industrial accounts are shared between a number of private hauling companies. At the transfer station, the load is placed into a trailer and taken to the Puente Hills landfill which is operated by the Los Angeles County Sanitation District. The ultimate operating life of the landfill is projected to be approximately twenty years. The County Sanitation District has developed various environmental control systems to eliminate, mitigate, and/or reduce to minimal levels, any potential impacts on the environment and surrounding areas from the landfill activities, such as:

- Gas collection and monitoring systems;
- Groundwater protection system;
- Dust and litter control;
- Monitoring of illegally deposited wastes;
- Landscape and irrigation systems;
- Resource Recovery.

Waste Composition:

To obtain an understanding of the amounts and types of waste that are generated by a city, Table 1 provides a waste composition analysis performed for the City of Los Angeles. As the table indicates, yard waste and miscellaneous paper comprise over two-thirds of residential waste. The percentages are similar to those County-wide, as shown on Table 2, and are indicative of the amounts and types of waste that are generated in the city of Lawndale.

Source Reduction:

Lawndale has three private accounts for recycling facilities in Lawndale which provide newspaper, glass, aluminum, and plastic pick up one time per week. Lawndale does not have any commercial or industrial recycling accounts at the present time.

Goals and Policies

Lawndale's Conservation Goals and Policies, which are designed to provide for efficient management and conservation of the City's natural resources, are as follows:

Goal 1. Water Conservation

Conserve water resources in the City through retention of the existing drainage system, the protection of limited groundwater resources, and domestic water conservation measures.

City of Los Angeles Residential and Commercial Waste Composition		
Material	Residential (% by weight)	Commercial/Indust. (% by weight)
Cardboard	2.6	9.7
Newspaper	5.7	5.4
Miscellaneous paper	25.5	17.2
Plastics	4.2	6.1
Aluminum	0.5	0.4
Ferrous and other metals	3.0	4.8
Glass	6.4	3.4
Textiles	2.2	2.8
Lumber/wood	2.2	22.6
Yard waste	35.6	4.1
Other/unclassified	3.3	19.2
TOTAL	100.0	100.0

Source: City of Los Angeles Solid Waste Management Plan, Phase I Report, Existing Conditions, August 1989..

City of Los Angeles Solid Waste Composition

table 1

Countywide Average Waste Composition for Los Angeles County		
Material	Residential (% of waste)	Commercial/Indust. (% of waste)
Newspaper	8	2
Glass	7	7
Tin cans	4	5
Aluminum cans	1	1
Plastic (all types)	5	7
Leather/rubber/textiles	6	8
Scrap wood	5	12
Yard waste	30	5
Ceramics/stone	3	4
Garbage	6	5
Miscellaneous paper/cardboard	20	40
Miscellaneous	5	4
TOTAL	100	100

Source: Solid Waste Management Status and Disposal Options in Los Angeles County, February 1988.

Los Angeles County Solid Waste Composition

table 2

Policy 1a

New construction and development shall conserve water through conservation techniques relating to water usage and waste.

Policy 1b

All new construction requiring indoor plumbing shall be required to install low-flow toilets, faucets and shower heads.

Policy 1c

New developments should install water conserving appliances, such as washing machines and dishwashers.

Policy 1d

Require the usage of xeriscape and micro-irrigation practices for development review approval of all landscape plans.

Policy 1e

Residential projects having common green areas, and all commercial, industrial, and public projects shall be required to install automatic, moisture sensing, micro-irrigation systems.

Policy 1f

Non residential projects shall be encouraged to incorporate decorative hardscape plazas with drought tolerant landscaping into project design.

Policy 1g

Examine and initiate where appropriate and feasible, the use of alternative water conservation systems, such as greywater and reclaimed water usage.

Policy 1h

Provide additional storm drainage facilities, and improve existing deficient facilities, where necessary as determined by the Los Angeles County Department of Waste Water Management and/or the City of Lawndale.

**Goal 2.
Air Quality**

See Air Quality Management Compliance Plan Goals and Policies

**Goal 3.
Energy Conservation**

Minimize negative environmental effects of supplying and using energy by reducing the community's reliance upon traditional energy resources through initiation of energy conservation practices and the utilization of available energy technology.

Policy 3a

Make use of energy audits and energy monitoring practices for publicly owned facilities and start programs to retrofit where necessary.

Policy 3b

Investigate the benefit and economic feasibility of establishing an energy coordinator position.

Policy 3c

Encourage innovative building, site design and orientation techniques which minimize energy use.

Policy 3d

Promote public awareness of energy conservation technology and practices in order to assist in the reduction of inefficient energy consumption.

Policy 3e

Inform the community of methods for achieving energy conservation.

Policy 3f

Encourage utility rate revisions, i.e. target or base rates that provide incentives for conservation practices

**Goal 4.
Cultural Resources**

Promote the preservation and rehabilitation of cultural resources that are significant to the Lawndale community because of their age, architecture, history, or symbolism.

Policy 4a

Promote the preservation and/or conservation of historic structures, places, and or architectural features.

Policy 4b

Investigate the appropriateness and feasibility of implementing a Historic Preservation Ordinance for the preservation of historic structures.

Policy 4c

Investigate the feasibility of implementing a local historic registry program.

Policy 4d

Encourage the preservation of historic structures on their existing sites, or relocation if necessary and feasible.

Policy 4e

Discourage the demolition or movement of historic structures without an evaluation of the condition of the structure, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives.

Policy 4f

Encourage the adaptive re-use of historic structures.

**Goal 5.
Solid Waste**

Promote source reduction as well as the safe and efficient transportation and disposal of the City's municipal solid waste.

Policy 5a

Prepare, adopt, and implement an Integrated Solid Waste Management Plan which includes a Source Reduction and Recycling Element per the provisions of Chapter 2 and commencing with Chapter 6 of the California Integrated Waste Management Act of 1989, Assembly Bill 939.

Implementation Programs**1. Water Conservation
Programs****1.1. Ordinance No. 671-91**

The City shall revise the Water Conservation Ordinance to require additional conservation measures relating to new construction, development, landscaping, and general water usage and waste. Increase limitations during a stage three alert status to limit use of water used during construction to non-potable water only and limit the number of new building permits to be issued.

1.2. Utilization of Runoff

Research and develop a system to utilize storm drainage runoff for public landscaping needs.

1.3. Public Information Program

Prepare and distribute public information pamphlets to assist residents in their conservation efforts. Information to be contained in the pamphlets should include simple sprinkler design, identification of low cost drought tolerant plant materials, and development of temporary greywater usage during a drought emergency.

1.4. Surface Drainage Improvements

The City shall identify the locations in need of surface drainage facilities or improvements, and coordinate with the Los Angeles County Department of Waste Water Management to carry out the improvement projects.

1.5. Zoning Ordinance Revision

For replenishment of the groundwater supply, the City shall revise the City's zoning Ordinance to promote the use of permeable materials in order to encourage water percolation to the soil.

2. Air Quality**2.1. Air Quality Management Plan**

Adopt and Implement the Air Quality Management Plan as contained in part three of the Resource Management Chapter of the General Plan.

3. Energy Conservation**3.1. Energy Conservation**

Coordinate with the Gas Company and the Electric Company to develop and implement an Energy Conservation Program with service teams that provide free home energy surveys and conservation items, such as fluorescent lightbulbs and low flow water fixtures.

3.2. California Environmental Quality Act

The City shall utilize the environmental review process, whenever appropriate, to evaluate energy use and potential energy impacts along with the appropriate mitigation measures requiring the use of energy conservation practices.

3.3. Retrofit

Evaluate and determine the best residential and non-residential retrofit program for energy conservation in existing structures. Adopt and implement the appropriate energy retrofit program.

3.4. Energy Efficiency Standards

The City shall establish and maintain appropriate energy efficiency standards for all new construction through a comprehensive energy management ordinance.

3.5. Title 24 Building Code Requirements

The City shall maintain appropriate legislation to establish, update, and implement energy performance building code requirements with respect to Title 24 of the Uniform Building Code and subsequent amendments.

3.6. Public Awareness

The City shall provide a model for the community, private and public, by undertaking and publicizing an energy efficiency and renewable energy resource program.

4. Historical/Cultural**4.1. Historic Preservation**

The City shall develop and implement a Historic Preservation Ordinance for the preservation of historic residences and structures.

4.2. Historic Registry

Establish the feasibility of implementing a local historic registry program that provides incentives for retrofitting and maintenance, as well as public recognition, of the local resource.

4.3. Demolition Review

The City shall prohibit the demolition or movement of historic structures without an evaluation of the condition of the structure, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives.

5. Solid Waste Programs**5.1. Recycling**

The City shall develop and implement a community recycling program which provides facilities and public information for commercial and industrial properties as well as for residential.

5.2. Recycling Center

Locate and develop a public Source Reduction and Recycling Center that provides facilities to accommodate paper, glass, aluminum, plastics, cardboard, and ferrous metals.

5.3. Private Recycling Accounts

Establish accounts with private hauling agencies to provide recycling facilities on commercial and industrial property.

AIR QUALITY MANAGEMENT PLAN

III. RESOURCE MANAGEMENT

3. Air Quality Management Plan

Introduction

As defined in the Southern California Association of Governments' (SCAG) Guidelines for the Development of Local Air Quality Elements (1990), the purpose of the air quality element is to: (1) address the problems of maximum air pollution levels that are more than twice the national clean air standard, (2) reduce the health and economic impacts of air pollution, (3) comply with the requirements of the 1991 Air Quality Management Plan (AQMP) for the South Coast Air Basin, (4) determine the best means of addressing those AQMP measures which provide a list of options for local government, (5) increase awareness of local responsibility for air quality and the vital role of local government in meeting the emission reduction goals of the AQMP, and (6) coordinate local efforts that impact air quality both locally and in the region.

Overview

The City of Lawndale is located in the southwest region of Los Angeles County which is within the South Coast Air Basin (SCAB). The SCAB is a 6,600 square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties.

Authority

California Government Code Sections 65300 and 65302 required every city and county to prepare and adopt "a comprehensive, long-term general plan for the physical development" of the community. While not explicitly listed as one of the required elements, air quality is a recommended topic for inclusion in General Plans, either as a stand alone element or as part of other elements (such as the conservation element or circulation element).

Organization

This Air Quality Management Plan addresses five main issue areas: land use standards, transportation demand management, energy conservation, citizen education, and intergovernmental relationships. These issue areas are discussed below, along with existing air quality and meteorological conditions. Following this information is a discussion of specific air quality goals, policies and implementation programs

Assessment

Issue Area: Land Use Standards

Land use issues relate to air quality considerations in a number of ways. First, the distribution of housing, employment opportunities and services affects the number of vehicle trips, the distance vehicles travel, and the congestion of the traffic patterns in a given area. Secondly, population growth implies an increase in vehicular travel which directly increases air pollution emissions. Lastly, land use decisions affect the extent to which people sensitive to air pollution are exposed to air contaminants.

Vehicle miles travelled (VMT) in the region are projected to increase 68 percent from 1985 to 2010 without implementation of the AQMP and the Regional Mobility Plan (RMP). The average length (in miles) of a vehicle trip is projected to increase by 19 percent over the same time period if the plan is not implemented. The dispersed land use pattern common in Southern California tends to separate employment areas from residential areas, thus encouraging dependency on car travel. The objective of growth management is to reduce VMT by locating jobs and housing closer together such that work commute trips will be shorter. As the jobs/housing balance improves and the VMT are reduced, fuel will be saved, congestion will be eased, and traffic flow will improve. All of these effects will reduce air pollutant emissions and, thereby, improve air quality.

Certain residents, such as the very young, the elderly and those suffering from certain illnesses or disabilities, are particularly sensitive to the health effects of air pollution. These people are known as sensitive receptors. Some examples of land uses where significant numbers of sensitive receptors are often found are schools and day care centers, parks and recreational areas, medical facilities, and rest homes and convalescent care facilities. Land use conflicts can arise when sensitive receptors are located next to major sources of stationary or mobile air pollutant emissions.

Issue Area: Transportation Demand Management

Transportation demand management (TDM) can reduce congestion and air pollutant emissions, resulting thereby in improvements to air quality. TDM programs reduce the number of vehicles on roadways using two sets of strategies. One set focuses on reducing trips related to work and the other is directed at non-work related trips. For example, TDM strategies for reducing trips related to work encourage individuals who now drive alone to form carpools, vanpools, or use mass transit. Non-work related trips can be reduced by such strategies as increasing the availability of mass transit to shopping centers, medical facilities, etc. or through the use of disincentives, such as limiting parking to discourage single-occupant vehicle travel.

**Issue Area:
Energy
Conservation**

In addition to the pollutant emissions associated with vehicles, energy consumption by residential and commercial furnaces, air conditioners, water heaters, etc. contributes to the South Coast's air quality problems. According to the 1991 AQMP, there are 3.3 million residential and commercial natural gas-fired water heaters in the South Coast Air Basin. These heaters emit nitrogen oxides (NO_x), which are a major constituent in smog formation. Even those homes and businesses that rely on electricity impact air quality, in that the demand for electricity requires an increase in power generation, which in turn produces air pollutants. Additionally, over half the homes in California are not properly weatherized according to a 1987 State Public Utilities Commission survey. Most residential and commercial buildings do not meet the conservation standards for new structures set by the California Energy Commission.

Recycling paper, glass, and plastic materials also provides significant energy savings. From an air quality perspective, this means less NO_x and other pollutants being emitted into the atmosphere. Recycling also reduces waste, controls litter, and conserves resources.

**Issue Area:
Citizen
Education**

Air pollution reduction measures proposed by the City or other regulatory agencies will only be effective if the general public is in support of them and is willing to make major life style changes. To obtain this support will require a comprehensive education policy informing citizens of the extent, causes, and consequences of the South Coast's air quality problems and acquainting them with options that they can personally implement.

**Issue Area:
Intergovern-
mental
Relations**

Because air quality problems in the South Coast Air Basin are largely regional in nature, a need exists for improved communication and coordination between the City of Lawndale and regional, state and federal agencies responsible for air quality planning and implementation.

Background**Climatology/
Meteorology**

The climate of Lawndale and all of the South Coast Air Basin is strongly influenced by the Pacific Ocean. One of the main determinants of the climatology is the location of the semi-permanent high pressure area in the north-eastern Pacific Ocean. With a Mediterranean-type climate, Lawndale is characterized by warm, dry summers and cool, wet winters with occasional rainy periods. The mean annual temperature is 63.9°F, and the average maximum and minimum temperatures are 74.2°F and 53.5°F, respectively. Precipitation averages 11 inches annually, and falls almost exclusively between November and April (National Oceanic and Atmospheric Administration, Sept. 1982).

California lies in the path of the prevailing northwesterly winds that predominate most of the year. During the late spring, summer, and early fall, descending warm air from the high pressure cell forms a stable temperature inversion over a cool coastal layer of air. When the high pressure cell migrates south with the onset of winter, the inversion is absent.

During the summer months, there is relatively good horizontal air movements because of the strong onshore air flow produced by the high pressure cell. Surface heating in the interior portions of the South Coast Air Basin creates a weak low-pressure center over these interior reaches that further intensifies the onshore

air flow during the afternoon and evening hours. In the fall and spring, however, the surface winds weaken. As a consequence, the capacity for the horizontal dispersion of pollutants is limited. Since this slow-moving surface air mass is held in place vertically by the high pressure cell in the northeastern Pacific region, air pollutant concentrations can build up. This situation can be reversed by the development of southeast winds, particularly known as Santa Ana winds, which transport additional pollutants out of the region.

Ambient Air Quality

Air quality is affected by urban and industrial developments (stationary sources) and motor vehicles (mobile sources). Hence, increases in population and urbanization also affect air quality. Air quality at a given location is a function of several factors, including the amount and type of pollutants being emitted into the air, both locally and regionally, and the dispersion rates of pollutants within the region. The major factors affecting pollutant dispersion are wind speed and direction, atmospheric stability, temperature, the presence or absence of inversions and the topographic and geographic features of the region.

Federal, state and local government agencies conduct many air quality monitoring programs in California. The California Air Resources Board (CARB) and the South Coast Air Quality Management District (SCAQMD) operate 32 ambient air quality monitoring stations throughout the South Coast Air Basin. The closest station to the City of Lawndale is the Hawthorne station. This station monitors ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), total suspended particulate matter (TSP), particulate matter smaller than 10 microns (PM₁₀), winds, temperature, and humidity. Table 1 summarizes the concentrations of the major pollutants observed at the Hawthorne monitoring station over the past five years.

The entire South Coast Air Basin has not met state and federal standards for O₃, CO, NO_x and PM₁₀. The following discussion describes the pollutant emission trends over the last five years (1985–1989) in the Lawndale area. CARB has not yet published the Summary of 1990 Air Quality data.

Ozone

Ozone is a secondary pollutant formed by complex chemical reactions involving hydrocarbons, oxides of nitrogen, and sunlight. As shown on Table 1, federal O₃ standards were violated during 3 days in 1987, 5 days in 1988 and 3 days in 1989 at the Hawthorne monitoring station. In addition, state O₃ standards were violated 10 days in 1987, and 11 days in 1988 and 1989. Based on the 1991 Air Quality Management Plan (AQMP) to be adopted for the South Coast Air Basin (SCAQMD 1990), attainment of O₃ standards is expected to occur after the year 2010.

Carbon Monoxide

Carbon monoxide is a gaseous pollutant that is primarily emitted by motor vehicles. For the 1-hour averaging time, the federal standard of 35 ppm has not been exceeded during the last 5 years; however, the state standard of 20 ppm has been exceeded 4 days or less per year. The federal and state standards of 9.0 ppm for an 8-hour concentration have been exceeded 13 and 30 days per year at the Hawthorne monitoring station.

As in most urban areas, high short-term concentrations of CO, known as "hot spots," can be a problem in the South Coast Air Basin. Hot spots typically occur in areas of high motor vehicle use, such as in parking lots, at intersections, and

Pollutant	Average Time	California Air Quality Standards	Federal Primary Standards	Maximum Concentrations (a)					Number of Days Exceeding Federal Standard (b)					Number of Days Exceeding State Standard (b)				
				1985	1986	1987	1988	1989	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Oxidants (Ozone) (c)	1 hr	0.09 ppm	0.12 ppm	0.11	0.19	0.20	0.22	0.19	0	8	3	5	3	2	19	10	11	11
Carbon Monoxide	1 hr	20 ppm	35 ppm	26	21	22	23	23	0	0	0	0	0	2	1	2	4	2
	8 hrs	9.0 ppm	9 ppm	21.3	15.0	14.1	15.9	16.4	13	23	22	30	28	13	23	22	30	28
Nitrogen Dioxide	1 hr	0.25 ppm	N/A	0.30	0.23	0.23	0.27	0.23	N/A	N/A	N/A	N/A	N/A	2	0	0	1	0
	Annual	N/A	0.053 ppm	0.061	0.042	0.035	0.036	0.037	1	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Sulfur Dioxide	1 hr	0.25 ppm	N/A	0.04	0.09	0.03	0.15	0.04	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0
	24 hrs	0.05 ppm	0.14 ppm	0.024	0.019	0.014	0.024	0.019	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
	Annual	N/A	0.03 ppm	0.008	0.005	0.004	0.005	0.005	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Total Suspended Particulates (TSP) (d)	24 hrs	N/A	260 µg/m ³	—	182	150	248	370	—	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Annual	N/A	75 µg/m ³	—	69.5	76.5	79.7	79.6	—	0	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PM ₁₀ (e)	24 hrs	50 µg/m ³	150 µg/m ³	N/A	N/A	N/A	—	133	N/A	N/A	N/A	—	0	N/A	N/A	N/A	—	24
	Annual	30 µg/m ³	50 µg/m ³	N/A	N/A	N/A	—	44.9	N/A	N/A	N/A	—	0	N/A	N/A	N/A	—	1

Source: South Coast Air Quality Management District and California Air Resources Board, 1985, 1986, 1987, 1988, 1989

Notes:

- (a) Maximum concentration units for ozone, carbon monoxide, nitrogen dioxide, and sulfur dioxide are in parts per million (ppm). Concentration unit for total suspended particulates (TSP) and PM₁₀ are in micrograms per cubic meter (µg/m³).
- (b) For annual standards, a value of 1 indicates the standard has been exceeded.
- (c) California standard for ozone was 0.10 ppm for the year 1985-1988. The standard was changed to 0.09 ppm in 1989.
- (d) In July 1987, the federal standards for TSP were replaced by standards for fine particulate matter less than 10 microns (PM-10).
- (e) PM₁₀ monitoring equipment was installed sometime during 1988 and started monitoring in 1989.

along freeways. Since CO build-up typically occurs at locations where traffic is congested, CO concentrations are often correlated with levels of service at intersections. Significant concentrations of CO sometimes occur (depending on temperature, wind speed, and other variables) where an intersection's level of service (LOS) is D or worse.

Other Pollutants

Three other pollutants are monitored continuously at the Hawthorne station: NO₂, SO₂, and two suspended particulate matters (TSP and PM₁₀). The first two pollutants occur mainly as a result of fuel combustion in both stationary and mobile sources. Particulate matter can result from natural causes (wind erosion) or from human activities, such as vehicles traveling on unpaved roads. The National Ambient Air Quality Standard (NAAQS) for NO₂ has been exceeded only once with SCAB since 1985, and the levels of SO₂ have been well below the NAAQS and California AAQS for many years. The annual federal standard for TSP was not exceeded during the years 1985 through 1988. However, the CARB and the EPA have both recognized that TSP, especially large diameter, inert soil particles, are not a good indicator of potential health effects of airborne dust exposure. Therefore, in July 1987, the federal standards for TSP were replaced by new standards for PM₁₀. The state standard for PM₁₀ was exceeded 24 days during the year 1989.

Goals and Policies

Just as no one community is responsible for the pervasive air quality problems in the South Coast Air Basin, no single community can adopt policies that will ensure compliance with state and federal air quality standards. Nonetheless, it will be the cumulative efforts of local and regional governments, along with the support of the general population that will be necessary if the air quality goals described below are to be met.

Efficient Land Use: Goal 1

Promote good air quality and mobility in an environment of continued population growth, while providing for a healthy economic base. The City will work towards reducing vehicle miles traveled (VMT) through an improved jobs/housing balance and a more efficient urban land use plan.

Policies

Policy 1a

Coordination in Job Development: Cooperate with federal, state, regional and other local jurisdictions to reduce VMT and, consequently air emissions, through creation of jobs in the local area.

Policy 1b

Attain growth management performance goals and/or VMT reduction consistent with the SCAG's Growth Management Plan.

Policy 1c

Improve the jobs/housing balance by encouraging the development and expansion of small businesses.

Policy 1d

Assist businesses coming into the area by participating in regional education and job training programs that prepare local residents to fill the jobs these businesses create.

Policy 1e

Establish an economic development program designed to enhance employment opportunities in the City.

Policy 1f

Support new mixed-use land use patterns which encourage neighborhood self-sufficiency and containment and discourage automobile dependency.

Policy 1g

Adopt land use policies that encourage the siting of facilities where significant sensitive receptors are likely to be present in areas that are removed from major intersections or traffic corridors and major pollution emitting sources.

**Reduce
Vehicle Trips
And VMT:
Goal 2**

Reduce reliance on single-occupant vehicles and reduce the number of non-work and commuting trips.

Policies**Policy 2a**

Because vehicle trips contribute to poor air quality, the City of Lawndale will implement a transportation demand management (TDM) program to reduce the number of trips.

Policy 2b

Require trip reduction plans as required under the thresholds established in the AQMP for its employees, new businesses, special events centers and temporary outdoor events. These plans will incorporate the following measures: alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education, and preferential parking.

Policy 2c

Assist employers wishing to establish transportation management associations.

Policy 2c

Assist local merchants to encourage their customers to shift from single occupancy vehicles to transit, carpools, bicycles, or foot.

**Improve
Transportation
Management:
Goal 3**

Participate in the efficient management of transportation facilities and improvements to transportation system infrastructure, using cost-effective system management and innovative demand-management techniques.

Policy**Policy 3a**

Transit improvements and facility development (such as the proposed light rail transit system, park-and-ride lots, bus turnouts, off-site parking, facilities for bicycles and pedestrians, and day care siting near public transit facilities) will accompany the City's TDM measures.

**Increase
Energy
Efficiency:
Goal 4**

Increase energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuel, and the implementation of conservation measures.

Policies

Policy 4a

Reduce energy consumption and shift to non-polluting sources of energy in its buildings and operations, and will encourage similar energy conservation techniques throughout the city.

Policy 4b

As part of the process in selecting contractors to provide outside services, the City of Lawndale will evaluate the energy and waste reduction programs of the prospective bidders. Those bidders with active conservation programs (including use of alternative fuel vehicles) will receive additional points in the rating scheme.

Policy 4c

Adopt the California Energy Commission's guidelines on "best practice" and "best technology" for new buildings (expected to be initiated in 1992).

Policy 4d

Ensure that new facilities use appliances that comply with current South Coast Air Quality Management District emission standards.

Policy 4e

Encourage the protection of solar access for both existing and new property owners for the use of solar collectors. Also, the City of Lawndale will encourage the state and federal government to enact taxation laws advocating the use of solar energy, and other equivalent technologies.

Policy 4f

Support regional waste recycling programs to help reduce the amount of solid waste disposal in landfills or transformation facilities. The City will also institute recycling programs at city facilities and encourage their implementation in all city operations.

Increase Citizen Education: Goal 5

Raise citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

Policy

Policy 5a

Cooperate with other governmental agencies, utility districts, sanitation districts, etc. in providing the public with information regarding methods available for reducing VMT and work trips, energy conservation, recycling and other air pollution reducing programs.

Promote Interagency Communications: Goal 6

Because air pollution sources in the South Coast Air Basin are so wide-spread, it is critical that solutions be coordinated among the responsible local, regional, county, and state governments.

Policy

Policy 6a

Implement air quality policies in cooperation with the Environmental Protection Agency (EPA), the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG). Also, the City will

participate in the development and update of the regional air quality management plans required under federal and state law.

Implementation Programs

1. Efficient Land Use

1.1 Inter-regional Agreements

Pursue inter-regional agreements required for the attainment of jobs/housing balance targets for Tier II (1994-1999) of the Regional Air Quality Management Plan.

1.2 VMT Targets

The City shall incorporate procedures to attain VMT reduction targets through jobs/housing balance at the subregional level (Santa Monica Bay or Long Beach/Downey area).

1.3 Growth Management Plans

Implement a growth management plan to reduce vehicle miles travelled through jobs/housing balance and mixed development land uses. The City will implement the growth management plan to attain subregional performance goals (defined by SCAG) through development of the General Plan, adoption of measures and ordinances by January 1992, and through issuance of development permits.

1.4 Growth Consistency

The City shall ensure that all proposed projects comply with regional and local growth management and air quality plans.

1.5 Subregional Strategy

The City's subregional growth management strategy (included in the growth management plan) shall involve the reassessment of performance goals and re-evaluation of the implementation measures and actions. This analysis will take place before January 1, 1994.

1.6 Locations of Growth

Encourage growth to occur in and around activity centers, transportation node corridors, underutilized infrastructure systems, and areas needing redevelopment.

1.7 Business Development

In an effort to improve both jobs/housing balance and air quality, adopt policies that encourage new small businesses to locate in Lawndale and existing firms to expand their operations. Assess the feasibility of providing incentives such as technical assistance and fast track permit processing to encourage business development within the city.

1.8 Reduce Particulate Matter

The City shall prepare ordinances requiring drought-resistant vegetation or surfacing material be applied to unpaved areas adjacent to paved City streets.

1.9 Sensitive Receptors

Adopt ordinances that ensure that new facilities in which sensitive receptors are located (i.e., schools, child care centers, playgrounds, retirement homes

and convalescent homes) are sited away from significant sources of air pollution.

2. Reduce Vehicle Trips And VMT

2.1 City Employees

For local city employees, the City shall adopt and submit to SCAG a program to reduce employee work trips by 30 percent by 2010 using any combination of alternative work schedules, flextime, and telecommuting strategies. Determine what impediments to work options exist and what alternatives that would be used to eliminate them.

2.2 Reduce Work Trips

The City shall support SCAG programs to reduce private employee work trips in new and existing facilities, using either alternative work schedules, work-at-home programs, telecommuting, or non-motorized transportation.

2.3 Shopping

By 1992 study (in concert with other nearby municipalities), the feasibility of requiring local cable television operators to determine in conjunction with local licensed businesses the feasibility of developing centralized ordering and home delivery services in order to reduce shopping trips for common household goods.

2.4 Home Occupations

Review home occupation regulations and modify, if necessary, to eliminate any unnecessary restrictions on reasonable home occupations and telecommuting.

2.5 Trip Reduction Plans

The City shall adopt ordinances/regulations to require facilities and buildings with 100 or more employees to submit trip reduction plans to SCAG.

2.6 Additional Trip Reduction Requirements

If, by July 1, 1995 trip reduction goals have not been met, the City shall expand the SCAQMD's Regulation XV to cover businesses or employers with 25 to 99 employees, including multi-tenant buildings with 25 or more employees.

2.7 Bicycle Routes

By January 1, 1994, the City shall include in the General Plan bicycle routes that will support the employer and non-work trip reduction plans.

2.8 Bicycle Parking Spaces

By January 1, 1993, the City shall enact ordinances requiring that parking spaces for bicycles be provided in new and existing commercial and industrial developments.

2.9 City Employee's Parking

The City shall implement a comprehensive city employee parking program and will periodically review parking rates to ensure that they reflect market value.

2.10 Public Parking

The City shall adopt ordinances by January 1, 1992 that will discourage vehicle trips by limiting parking. The following programs will be considered for adoption:

- Increase daytime parking fees
- Establish a surcharge on parking for single occupant vehicles and/or discounts for multi-occupant vehicles.
- Eliminate peak-period on-street parking
- Eliminate 100% employer-subsidized parking
- Require employer-sponsored preferential parking for ridesharers for employers of 100+ employees (short-term) and 25+ employees (long term).
- Establish residential parking permit programs in all areas adjacent to congested commercial activity centers.
- Strengthen parking enforcement operations
- Establish a cap on total number of parking spaces in a zone and maximum number of parking spaces per square foot of particular use.

2.11 Non-Work Trip Reductions

The City shall adopt a non-work trip reduction ordinance by July 1, 1992 to require major retail centers to offer customers mode-shift travel incentives to single occupant vehicles and provide facilities for non-motorized transportation needs.

2.12 Auto Use Restrictions

The City shall adopt an ordinance specifying appropriate auto use restrictions for major new developments and pedestrian malls and the coordination of these facilities with existing and planned park-n-ride lots, rail service, and bus lines.

2.13 Restrict Vehicle Access

To the extent feasible, the City shall adopt an ordinance by January 1, 1994 which restricts vehicle at major activity centers to shuttles, mass transit, and non-motorized modes, and closes streets as needed. The criteria for street closure should consist of heavy peak-period congestion and lack of parking, combined with existing or potentially heavy pedestrian activity. Auto-restricted areas must be adequately served by transit/shuttle/park-n-ride.

2.14 Incentives

Develop legislative proposals to sponsor and/or support legislation that would provide tax credits, emission credits, or other benefits for employers who implement the use of van pools and/or sponsor work day use of clean fuel vehicles.

2.15 Truck Deliveries

In concert with other nearby municipalities, adopt an ordinance or Memorandum of Understanding (MOU) that establishes appropriate measures to reduce the operation of heavy-duty trucks during the hours of heaviest commuting.

3. Improve Transportation Management**3.1 Traffic Flow Improvements**

The City shall implement either Automated Traffic Surveillance and Control and similar interconnected traffic signal control systems or appropriate non-interconnected synchronization methods on all streets where traffic volume and delay time is significant. Annual monitoring reports on the number of intersections modified shall be submitted to SCAG.

3.2 Government Vehicle Fleets

By 1994, the City shall commit to a phased-in replacement of the local government fleet by electric vehicles: 10% by the year 2000, 20% by the year 2010. Annual monitoring reports on progress made toward the objective will be submitted to SCAG.

3.3 Mass Transit

The City shall support the extension of light rail, trolley and other mass transit services. The City shall also influence rail transit alignment and bus station locations for maximum commuter access to shopping centers and work districts and to minimize local air pollutant impacts at seriously congested intersections..

3.4 Construction Traffic Control

The City shall restrict construction to off-peak hours to improve traffic flow and reduce vehicle delays, and shall provide city traffic officers to manage traffic flow during major construction projects.

4. Increase Energy Efficiency**4.1 Solid Waste Reduction**

The City shall adopt an ordinance consistent with California Assembly Bill 939 to meet the 1995 targeted goal of a 25% reduction of residential solid waste requiring disposal and a 50% reduction by the year 2000.

4.2 Minimize Disposable Packaging

Support state legislation to tax product packaging at a rate that reflects the total cost associated with collecting and disposing of the material as waste. Exemption from the tax would be provided for packaging that meets minimum criteria for recycled content and/or recyclability.

4.3 Reduce Energy Use in City Facilities

The City shall reduce overall energy use in city facilities by 8% by 1994, 15% by 2000, and 30% by 2010, with a particular emphasis on peak demand reduction. The City facilities and equipment that utilize energy shall incorporate the most energy efficient design consistent with a reasonable rate of return and the recognition of the environmental benefits from energy conservation.

4.4 Reduce Public Energy Consumption

The City shall enact the AQMP Energy Working Group's recommendations to reduce the energy consumption for residential and commercial buildings by 4.5% by 1994 and 30% by 2010. In order to achieve the 2010 conservation

goals, the City shall encourage the incorporation of energy conservation features in the design of all new construction and the installation of conservation devices in existing developments.

4.5 Support Tax Credit Legislation

Continue to seek state and federal legislation for tax credits for implementation of energy conservation measures and for passage of a state energy efficiency revenue bond program for the City of Lawndale.

4.6 Encourage Solar Power Development

In order to promote the use of solar power, City will adopt ordinances that protect solar exposure for residences and commercial businesses, and will investigate the feasibility of attracting a solar energy demonstration project at a city facility.

4.7 Minimize Use of Polluting Building Materials

Through zoning regulations or modifications to the Building code, the City shall encourage the use of building materials and methods that minimize the emissions of Reactive Organic Gases, particulates, and ozone layer-depleting chemicals.

4.8 Contractor Efficiency

As part of bid submittals by contractors for city services, require information on measures the contractor has implemented both locally and region-wide to reduce and minimize air pollution.

4.9 Street Lights Efficiency

Investigate the feasibility of a phase-in of more efficient street lights.

5. Increase Citizen Education

5.1 Reduce Traffic

In concert with other municipalities and agencies, develop an education campaign to reduce non-community trips during rush hours and to urge commuters to take advantage of ridesharing and mass transit options.

5.2 Reduce Other Air Pollution Sources

In concert with other municipalities and agencies, develop an education campaign to inform citizens of the benefits of other air pollution-reducing programs, such as recycling and energy conservation.

6. Promote Inter-agency Communications

6.1 Information Gathering

Establish contacts with SCAQMD, SCAG, CARB and other local, state, and national agencies for the purpose of obtaining information on specific policies that can be implemented city-wide to reduce and minimize air pollution. The goal will be to make use of experience and expertise at these agencies in order to better evaluate realistic policies and options.

6.2 Coordination

Coordinate with SCAQMD, SCAG, CARB and other local, state, and national agencies in efforts to plan and implement clean air strategies for the South Coast Air Basin.

6.3 Consistency with Plans

The City shall ensure that all proposed projects comply with the Regional Growth Management and Air Quality Plans.

IV. HAZARD MANAGEMENT

SEISMIC/SAFETY ELEMENT

IV. HAZARD MANAGEMENT

1. Safety Element

Introduction

Overview

This Safety Element addresses: seismic, fire and hazardous materials safety.

The objective of the seismic portion of the Safety Element is to reduce the risk of hazard resulting from future seismic and related events. The City of Lawndale does not contain faults but would be affected by fault activity outside of the community and in the regional area. The seriousness of seismic risk to public safety is a function of local seismic conditions, as well as public awareness of the hazards present, and the effectiveness of mitigation utilized to reduce risk resulting from seismic hazards. This Element identifies existing and potential land use and emergency planning efforts which would be instrumental in planning for seismic safety.

The objective of the fire portion of the Safety Element is to ensure the safety of the community from fire and manmade or natural disasters. This Element identifies existing and potential emergency planning efforts which would be instrumental in assuring public safety.

The objective of the hazardous materials portion of the Safety Element is to provide for the protection of the community from any unreasonable risks associated with the presence of hazardous materials (hazardous substances and hazardous wastes). Hazardous materials are generated, stored, used, managed and transported within the City of Lawndale, in close proximity to residential areas. The seriousness of exposure risk to public safety is a function of the proximity of the release, the characteristics of the materials release, the amount of materials present, and public awareness of the hazards present. This Element identifies existing and potential emergency response, community planning and hazardous materials reduction measures which would be instrumental in minimizing hazardous materials risks.

Authority

The purpose of the Safety Element of the General Plan is to bring community safety issues into the long-range planning process. The State of California requires that safety elements be included in city and county general plans per Government Code Section 65302(g):

"[The general plan shall include] a safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards known to the legislative body; flooding; and wildland and urban fires. The safety element shall include mapping of known seismic and other geologic

hazards. It shall also address evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards."

Organization

The seismic, fire, and hazardous materials portions of this Safety Element provide an assessment of existing conditions in the City of Lawndale. These sections consider the identification and appraisal of hazards with respect to their potential impacts on the City. Goals and policies are presented which provide direction for the achievement of seismic, fire, and hazardous materials safety in both existing and future development. Implementation programs are provided which will achieve the safety policies.

Assessment

Seismic

The existing seismic conditions for the City of Lawndale consist of a discussion of fault setting and history, and predicted seismic hazards. Seismic hazards are discussed with respect to their potential impact on the City, and include ground rupture, groundshaking, liquefaction, subsidence, landsliding, tsunamis and seiches, and dam failure.

Fault Setting and History

Lawndale is situated in the seismically active Los Angeles Basin where numerous active and potentially active faults have been identified. Within the city limits of Lawndale, however, no faults or fault-related features have been identified.

The likelihood of a fault being the source of an earthquake varies. In an attempt to compare the significance of different faults, the following classification has been generated by geologists and seismologists:

1. Historically Active Fault – a fault that is known to have moved during historical time, which is considered to be approximately 150 years.
2. Active Fault – a fault that has slipped in the recent geological past and can be expected to move again in the future. Recent geological past is interpreted to be a period of 11,000 years.
3. Potentially Active Fault – a fault is considered suspect because of identified offset of Quaternary sediments that are less than 1.5 million years old.

Seismic impacts to Lawndale could only be caused by movement along faults situated outside of the city limits. The historically active and potentially active faults that could affect Lawndale are listed in Table 1 and included in Figure A. The approximate probabilities of fault movement should be considered on a relative scale, where "likely" means a probability greater than 50 percent and "low" a probability of less than 15 percent. From existing information, two faults are particularly significant for the City of Lawndale; the Newport-Inglewood fault because of its proximity to the community; and the San Andreas because of its high probability of occurrence. These two will be discussed in greater detail in the following sections.

Two other faults, the Whittier-Elsinore and the San Fernando, will also be further discussed because of a significant event on each within the last twenty years.

Fault	Distance from Lawndale (miles)	Approximate Probability of Fault Movement (100-year Period)
<u>Historically Active</u>		
Newport-Inglewood	2	Intermediate
Whittier-Elsinore	15	Low
San Fernando	25	Intermediate
San Andreas	46	Likely
San Jacinto	55	Likely
<u>Potentially Active</u>		
Palos Verdes	7	Low
Santa Monica	12	Low
Raymond Hill	18	Very Low

Known Historically Active and Potentially Active Faults

table 1

NOT TO SCALE

Newport-Inglewood Fault. The Newport-Inglewood Fault Zone is the closest active fault to the City of Lawndale. The Newport-Inglewood Fault consists of a series of northwest-trending, generally right-lateral strike-slip fault segments (Figure B). This zone forms the western margin of the Los Angeles Basin. In the north, the Newport-Inglewood Fault terminates at the east-northeast trending Santa Monica fault, which is located along the southern margin of the Transverse Range. To the south, the Newport-Inglewood Fault extends to Newport Beach and projects seaward into a system of faults having similar trends that can be traced south into Baja California (Hauksson 1987).

At least five earthquakes of magnitude 4.9 or larger have been associated with the Newport-Inglewood Fault since 1920 and have had an effect on the City of Lawndale. The first reported damaging earthquake was the 1920 Inglewood earthquake with a local magnitude (M_L) of 4.9. The largest instrumentally recorded earthquake in the Newport-Inglewood Fault was the Long Beach earthquake ($M_L = 6.3$) in 1933. This quake was followed by a large aftershock ($M_L = 5.4$) near Signal Hill several months later. In 1941, the Gardena earthquake ($M_L = 5.0$) and the Torrance-Gardena earthquake ($M_L = 5.5$) were also associated with the Newport-Inglewood Fault.

The intensity of groundshaking in the vicinity of Lawndale during each of the four notable earthquakes since 1933 is estimated to have been between V and VII on the Modified Mercalli Intensity Scale (Neumann 1935, 1943). Intensity describes the degree of shaking in terms of the damage at a particular location. The scale used today is the Modified Mercalli scale which is composed of 12 categories as described in Table 2.

Since 1973, short-period seismic networks operated by the University of Southern California, Caltech, and the U.S. Geological Survey have recorded a steady rate of small earthquakes along the Newport-Inglewood Fault. Based partially on the reported seismicity since 1920, the Newport-Inglewood Fault has been identified as an historically active fault capable of generating damaging earthquakes and has been declared a special study zone under the Alquist-Priolo Special Studies Zones Act of 1972 (Hart 1985). The Newport-Inglewood Fault Special Studies zone has an average width of 2 miles. Its western edge is present approximately 1 mile from the eastern edge of the City of Lawndale. The purpose of the Act is to regulate development within the zone and to mitigate the hazard of ground rupture. The City of Lawndale, however, is not in this special study zone; therefore, the regulation of city development with respect to seismic hazards is not affected by state regulations.

San Andreas Fault. The City of Lawndale is 46 miles from the closest segment of the San Andreas fault system. This fault system extends from Cape Mendocino in the north to the Salton Sea, and produces right-lateral offsets (Figure A). The San Andreas system contains a number of distinct segments, each segment displaying a different mode of seismic behavior and, in turn, posing different seismic hazards (Wesnousky 1986).

Two segments of the San Andreas are present east of Lawndale. The first segment is estimated to extend from just south of the Carrizo Plain to just north of the Cajon Pass. The average recurrence interval for this segment is 360 years. The second important segment of the San Andreas, with respect to Lawndale, is the southernmost portion of the fault system. This segment extends from the Cajon Pass to the Salton Sea, and has a predicted repeat-time of 170 years for large earthquakes.



Local Fault and Fault Map
 figure B

M §	Intensity	Effects	v, † cm/s	g ‡
	I.	Not felt. Marginal and long-period effects of large earthquakes.		
3	II.	Felt by persons by rest, on upper floors, or favorably placed.		
	III.	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.		0.0035-0.007
4	IV.	Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking walls. Standing cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frames creak.		0.007-0.015
	V.	Felt outdoors; direction estimated. Sleepers awakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.	1-3	0.015-0.035
5	VI.	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle).	3-7	0.035-0.07
	VII.	Difficult to stand. Noticed by drivers of cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.	7-30	0.07-0.15
6	VIII.	Steering of cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.	20-60	0.15-0.35
7	IX.	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations). Frame structures, if not bolted, shifted off foundations. Frame racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake fountains, sand craters.	60-200	0.35-0.7
8	X.	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.	200-500	0.7-1.2
	XI.	Rails bent greatly. Underground pipelines completely out of service.		>1.2
	XII.	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.		

Note: Masonry A, B, C, D. To avoid ambiguity of language, the quality of masonry, brick or otherwise, is specified by the following lettering (which has no connection with the conventional Class A, B, C construction).

- Masonry A: Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.
- Masonry B: Good workmanship and mortar; reinforced, but not designed to resist lateral forces.
- Masonry C: Ordinary workmanship and mortar; no extreme weaknesses such as non-tied in corners, but masonry is neither reinforced nor designed against horizontal forces.
- Masonry D: Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

† Average peak ground velocity, cm/s.

‡ Average peak acceleration (away from source).

§ Magnitude correlation.

CITY OF LAWNDAL
GENERAL PLAN

Modified Mercalli Scale, 1956 Version

table 2

The two largest earthquakes recorded along the San Andreas were located north of the Cajon Pass. The Fort Tejon earthquake ($M_L = 7.5-8.5$) occurred in 1857 and the San Francisco earthquake ($M_L = 8.3$) in 1906.

The intensity of groundshaking in the vicinity of Lawndale during the 1857 earthquake was not recorded, but reached a level of IV for the 1906 earthquake.

Whittier-Elsinore Fault. The City of Lawndale is 15 miles from the closest segment of the Whittier-Elsinore Fault zone. This fault is right-reverse slip and slip along the fault has been estimated from drainage deflection to be 1.7 miles (Hauksson 1988). This fault zone is the eastern edge of the Los Angeles Basin.

The Whittier Narrows Earthquake ($M_L = 5.9$) which occurred on October 2, 1989, is one of the largest earthquakes in the Los Angeles Basin in recent history. The earthquakes epicenter was located in the northeast corner of the Los Angeles Basin between the surface traces of the Raymond Hill and Whittier Faults and its focus was 8.7 miles below ground surface. The epicenter region is characterized by northwest trending faults that cross east west trending folds of the Santa Monica anticline. Principal members of this fault set include the Whittier Extension and Whittier Faults.

Initial analysis placed the Whittier Narrows earthquake on the Whittier fault because of the proximity of its epicenter and high levels of destruction near the faults trace in the City of Whittier. Subsequent seismological data on the depth, location and focal mechanism of the main shock and lack of ground rupture on the Whittier Fault indicated otherwise.

The Whittier Narrows earthquake is now believed to have occurred on the previously unidentified Elysian Park thrust which underlies the Santa Monica Mountains (Davis and Namson 1989).

The City of Whittier experienced groundshaking of modified Mercalli intensity VIII, which was the highest intensity reported, while a VI was recorded in Lawndale (Hauksson 1988).

San Fernando Fault. The City of Lawndale is 25 miles from the San Fernando Fault Zone. The fault zone is an eastward trending system of North-dipping reverse and thrust faults within the Transverse Range structural province. The San Fernando fault zone includes three segments: the Mission Wells; the Sylmar; and the Tujunga.

Prior to 1971, the San Fernando area had been one of low to moderate seismic activity. Only about 10 earthquakes of magnitude 3.0 and greater occurred between 1934 and 1971 as recorded by the California Institute of Technology. Previous to 1934, two earthquakes were described to have had epicenters in the area. An earthquake ($M_L = 5.2$) occurred in 1930 and the Pico Canyon earthquake ($M_L = 6.0$) occurred in 1839. None of these earthquakes were determined to have been on the San Fernando Fault.

In 1971, the San Fernando Fault was first discovered to be active when it ruptured on February 9. The intensity of groundshaking in the immediate area of the earthquake ranged from VIII to XI on the modified Mercalli intensity scale, while a VI was measured in the City of Lawndale (Wentworth and Yerkes 1971).

Predictive Seismic Hazards

The abrupt release of slowly accumulating strain on a fault which occurs during an earthquake has a number of primary and secondary effects on the physical environment. Primary effects consist of ground rupture and ground shaking, while secondary effects include liquefaction, ground subsidence, landsliding, tsunamis and seiches, and dam failure.

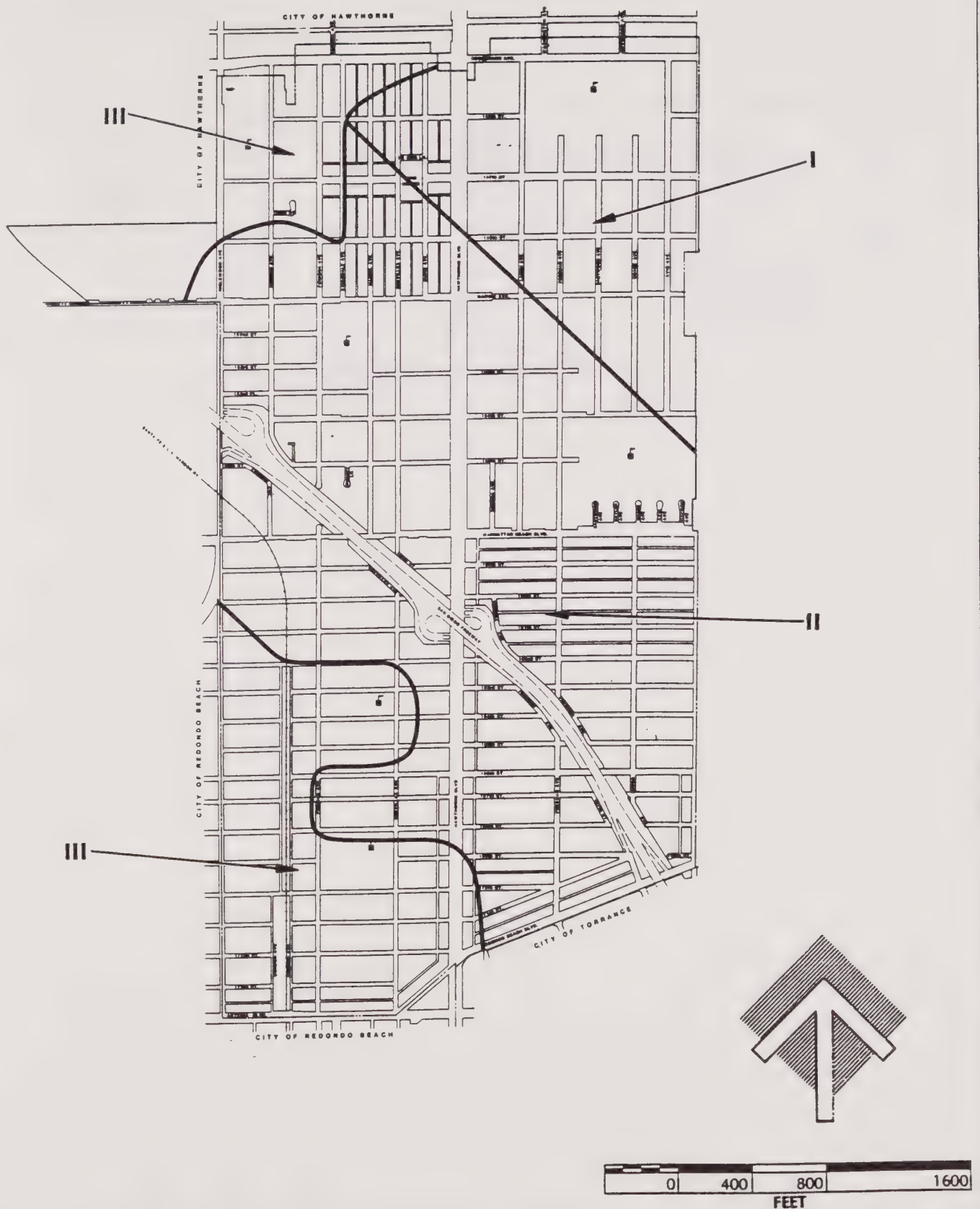
Ground Rupture. Since ground rupture occurs at the surface expression of a fault and no active or potentially active faults are known to be present in the City of Lawndale, hazards due to ground rupture are not considered to be significant.

Groundshaking. The seismic hazard with the most potential for impact to the City of Lawndale is groundshaking induced by any earthquake on a regional fault like the San Andreas or a moderate earthquake on a local fault like the Newport-Inglewood. The extent of groundshaking is dependent upon the distance of Lawndale to the earthquake's epicenter and the characteristics of near surface soils in the city. The majority of the City of Lawndale lies on firm alluvium, and the remainder on sand dunes. Based on these criteria and the distance to the Newport-Inglewood Fault, three seismic zones have been delineated by the city (Figure C) and their characteristics are presented in Table 3. Because the City of Lawndale is small, all of the city is within two to five miles of the Newport-Inglewood Fault. For this reason, groundshaking zones have been developed primarily on the characteristics of near surface soils and secondly on the distance to the Newport-Inglewood Fault. The duration of strong shaking during a Newport-Inglewood Fault seismic event would be the longest in Zone III due to soil conditions, and less but equal in Zones I and II due to distance from Newport-Inglewood Fault.

To ensure that the City of Lawndale can withstand groundshaking from a maximum credible earthquake, ground acceleration parameters were calculated for each fault in the area. Maximum credible earthquakes were determined based on historic seismicity, an understanding of California tectonics, and fault length by Greensfelder in 1972. Using this information and a set of existing curves (Figure D) relating peak acceleration in rock, distance from fault rupture, and magnitude, peak rock acceleration values for Lawndale were estimated (Table 4).

The greatest damage due to groundshaking is not associated with the peak acceleration but rather the series of repeatable accelerations which follow (Ploessel and Slossen 1974). Therefore, repeated high ground acceleration (RHGA) should be of greater concern in structure design than the single peak of maximum acceleration. Typically the RHGA averages 65 percent of the peak acceleration within 20 miles of the epicenter. Beyond 20 miles the RHGA approaches 100 percent of the peak acceleration (Greensfelder 1972). The concept is believed to be valid for earthquakes of magnitude 5.5 to 7+. For larger quakes a similar relationship may exist but sufficient field acceleration data are not available. The seismic parameters for active and potentially active faults and their estimated groundshaking effects in the Lawndale area are presented in Table 4.

The seismic parameters listed in Table 4 are not intended for direct engineering use but rather as a subjective evaluation of fault activity in the Los Angeles Basin with respect to the City of Lawndale. Groundshaking hazards throughout Lawndale will be highly site-specific and building-specific. The geologic and engineering concerns for each site would need to be evaluated by a registered civil or geotechnical engineer (RCE or GE), a certified engineering geologist (CEG), and a registered structural engineer (SE).

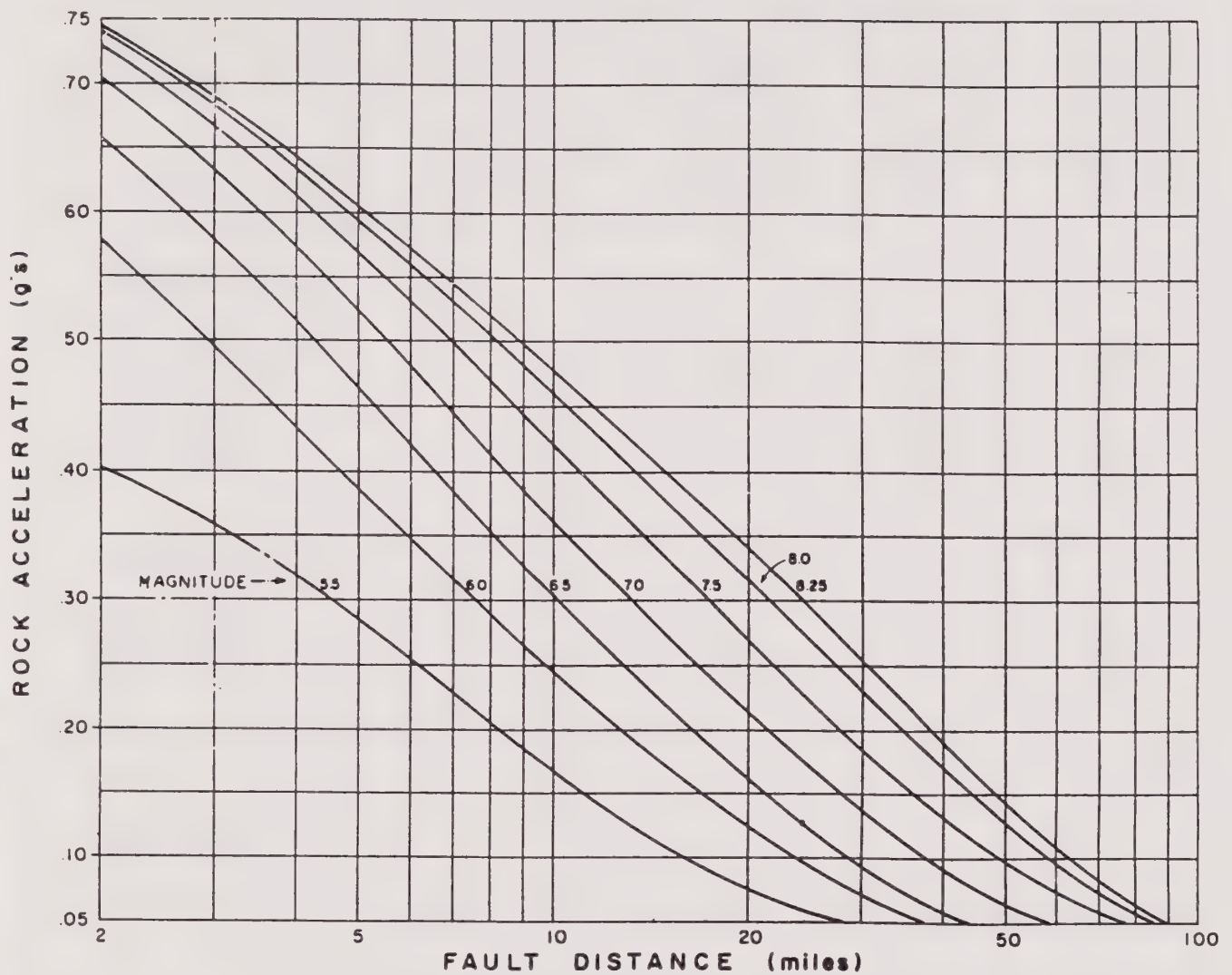


Seismic Hazard Zones for Groundshaking
figure C

Zone	Distance from Newport-Inglewood Fault (miles)	Near Surface Material
I	2-3	Firm Alluvium
II	3-5	Firm Alluvium
III	3-5	Sand Dunes

Seismic Zone Characteristics

table 3



SOURCE: Schable and Seed, 1972

Rock Acceleration Versus Fault Distance and Earth Magnitude

figure D

Fault	Distance to Lawndale (miles)	Maximum Credible Earthquake ¹ (Richter Magnitude)	Peak Horizontal Bedrock Acceleration ² (g's)	Repeatable Horizontal Bedrock Acceleration (g's)
<u>Historically Active</u>				
Newport-Inglewood	2	7.0	0.70	0.46
Whittier-Elsinore	15	7.5	0.35	0.23
San Fernando	25	6.5	0.13	0.13
San Andreas	42	8.25	0.18	0.18
San Jacinto	55	7.5	0.08	0.08
<u>Potentially Active</u>				
Palos Verdes	7	7.0	0.45	0.29
Santa Monica	12	7.5	0.39	0.25
Raymond Hill	18	7.5	0.28	0.18
Notes:				
¹ Greensfelder, 1972				
² Schnabel and Seed, 1972				

Liquefaction. Liquefaction involves a sudden loss in strength of saturated cohesionless soil and the temporary transformation of the soil to a fluid mass as a result of increased pore pressure and reduced effective stress due to earthquake vibrations (Seed and Idriss 1970). Generally, liquefaction requires loose unconsolidated sands or silts at or near the local water table, where the water table is less than 30 feet below ground surface.

In the City of Lawndale, liquefaction potential must be assessed on a site by site basis. Several factors are significant in influencing liquefaction potential: soil type; in situ density; initial confining pressure; groundshaking intensity; and duration of shaking.

Presently, the liquefaction potential within the city is considered low due to the presence of firm alluvium and the fact that average depth to ground water in local wells reported in 1990 was 100 feet below ground surface (LADPW Personal Communication 1991); however, the possibility of a perched water table must be evaluated on a site-specific basis.

Subsidence. Subsidence can occur in unconsolidated soils during earthquake shaking, producing a more efficient rearrangement of individual soil grains. Subsidence results in the downward movement of the ground surface over a large or limited area. Significant subsidence causing structural damage is typically associated with rapidly deposited alluvial material, or improperly compacted fill. Regarding the former issue, no such areas were identified within Lawndale. The latter issue must be evaluated on a site-specific basis.

Landsliding and Mudsliding. The entire City of Lawndale is located in a relatively flat alluvial plain which is several miles from any hills or mountains. Seismically triggered landslides are generally confined to hilly or mountainous terrain, therefore the likelihood of a seismically triggered landslide affecting the City of Lawndale is unlikely.

Seismically triggered mudslides of rain-saturated soil and weathered bedrock areas would not affect the City of Lawndale, because of its geographic location.

Tsunamis and Seiches. A tsunami is a sea wave generated by submarine earth movement such as a submarine earthquake on an active fault. Faults located off the California coast are not believed to be characterized by the large vertical displacements which are required to generate tsunamis. Further, the topographic relief along the Santa Monica Bay shoreline is abrupt (about 40 feet). Therefore, the risk to Lawndale from tsunamis is considered to be insignificant.

A seiche is an earthquake-induced wave occurring in a confined body of water such as a lake or reservoir. Since no significant bodies of water exist within or adjacent to Lawndale, seiches are anticipated to have no significant impact on the City.

Dam Failure/Flooding. The City of Lawndale does not lie in a 100-year floodplain or a dam inundation zone. Therefore, no risk exists to the City of Lawndale from flooding and dam failure.

Implications for Long-range Planning

- As Lawndale redevelops and older buildings are replaced, the City's seismic risk will decrease since newer buildings will meet the latest local and state seismic safety standards.
- Prepare inventory of unreinforced masonry buildings to assess need for structural rehabilitation.

Fire Safety

The City of Lawndale is under the County of Los Angeles Consolidated Fire Protection District jurisdiction. The District serves 48 cities in the Los Angeles County area, covering 2,186 square miles. Within Lawndale, the District has a station on 147th Street, east of Hawthorne Boulevard.

Due to Lawndale's urban form, fire emergency response is typically limited to structural, rubbish, and vehicular fires. Constraints to fire response include narrow streets, inadequate fire flows and limited access to some large structures. Such constraints decrease fire fighting efficiency and could ultimately result in increased property damage and loss of life. The constraints are related to how the City has evolved into its present urban form, which has resulted in water flow deficiencies and a problematic physical layout.

Water Flow

Water is one of the primary tools in controlling fires. The combination of water quantity and pressure is commonly referred to as fire flow. Fire flow is measured in gallons per minute (gpm) and the total gpm required to adequately fight a fire is determined by the land use pattern and intensity.

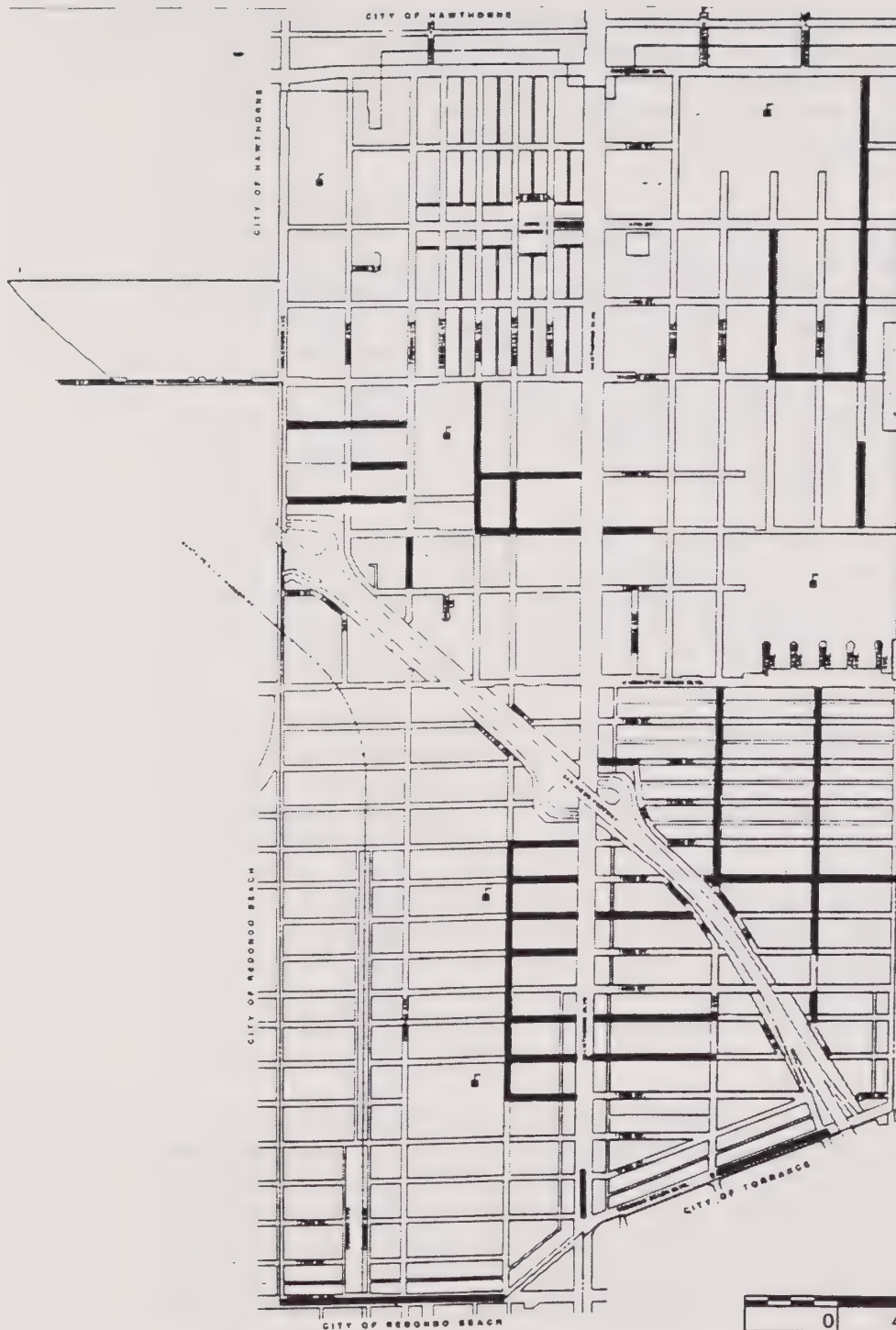
Lawndale was initially developed as a single-family residential suburb of Los Angeles. At that time, four inch mains were adequate to meet water fire flow requirements. Over time, however, as the urban form became more intense, fire flow requirements increased, but the actual physical improvements to the system lagged far behind. Figure E illustrates the areas where the required fire flow is not achieved by the existing conditions of the facility. As the figure shows, there are many areas that require upgrading to meet need. Incremental improvements to the City water facilities have occurred over time. An overall Citywide program should be implemented.

Street Width

Another fire fighting and emergency response constraint is the narrow streets found throughout the City. Narrow streets greatly restrict the maneuverability of fire equipment. This problem is accelerated in the evenings because of on-street parking. Related to narrow streets is the problem of small curb cuts and deep, narrow lots. Subdivision regulations, at the time the City was substantially developed, were less specific regarding access requirements. Because of this, many structures and areas of the City do not meet emergency access requirements.

Accessibility/Design

Beyond fire flow inadequacies, road width, and site access constraints, fire and emergency response is hindered by the physical accessibility and design of structures. Many areas of Lawndale have experienced infill development comprised of large apartment structures. Design of these structures was based on achieving high densities and therefore, many lack sufficient open space areas that would allow



SOURCE: SCWC 1991 (Based on random sampling of fire hydrants)

Water Mains with Inadequate Fire Flow
figure E

fire fighting and emergency personnel room to operate. Besides the problem of access related to design, many old structures have experienced significant buildups of rubbish. Lack of property maintenance contributes to the number of fires city wide as well as to the overall accessibility constraints of fighting the fire. These problems are being dealt with through code enforcement, fire access guidelines, and the fire department's participation in the development review process.

Emergency Response

Public Safety for the City of Lawndale is further ensured through comprehensive emergency action programs. These programs are in conjunction with the Consolidated County Fire Protection District and the region. The Consolidated Fire Protection District, along with the County of Los Angeles' Sheriff's Department, provides evacuation and emergency response service in the event of a large scale local event. The City is part of a Master Mutual Aid program which details the progression from local to regional to state to federal involvement in an emergency. State and federal involvement require large scale disaster and threat of invasion or massive destruction through natural or manmade occurrences.

Local emergencies requiring City and regional efforts may include the presence of toxic substances in the air, a massive fire or other disaster which would necessitate evacuation or the movement and emergency care of persons. In this respect, The Consolidated County Fire Protection District Plan identifies emergency staging areas, helispots, care facilities (with alternative routing), and evacuation practices.

Staging areas for apparatus, equipment, and manpower include the property adjacent to the fire station on 147th Street, The Lawndale City maintenance yard, the Los Angeles County Road Department Yard, Lloyd High School, Alondra Park, Luezing High School, and El Camino College. Helispots are identified by the Fire Protection District as either primary or secondary. Lloyd High School is the primary location with El Camino College, Alondra Park and Luezing High School as secondary. Temporary care facilities are Lloyd High School as well as El Camino College and Alondra Park. Actual evacuation routes and staging areas are dependent upon the level and location of the emergency. Through the Mutual Aid Agreement and Chapter 2.68 of the Lawndale City Code, the City further receives direction from the state and federal governments, should the level of disaster or emergency warrant.

Hazardous Materials

Hazardous materials are defined as substances which may be injurious to human health or the environment. These materials include both hazardous substances and hazardous wastes. This section addresses the potential sources and locations of hazardous materials within the City of Lawndale. A review of disclosure procedures and current laws and regulations is presented for both hazardous substances and hazardous wastes. The potential risks to the community from the presence of hazardous materials is discussed.

Hazardous Substances

Hazardous substances are used in a variety of industrial and non-industrial applications. This section describes those applications deemed likely within the City of Lawndale.

Location/Surrounding Land Use. Industrial facilities with the potential for the presence of hazardous substances include commercial automobile facilities, light industrial facilities, manufacturing facilities and oil production facilities. Typical types of commercial automobile activities within the City of Lawndale are service

stations, body shops and detailing facilities. Typical types of light industry are furniture assembly plants, warehousing activities and printing operations. Typical types of manufacturing operations are machine shops, plastic and ceramic manufacturing. Table 5 presents a listing of hazardous substances present in the City of Lawndale.

Figure F presents the locations of commercial automotive, light industrial and manufacturing facilities within the City of Lawndale. Commercial automobile properties within the city limits tend to be located along the major surface streets such as Hawthorne Boulevard, Redondo Beach Boulevard and Compton Boulevard. Light industrial and manufacturing properties within the city limits are generally clustered into three areas: the western side of the city just south of Interstate 405; the western side of the city north of Interstate 405; and the northwest quadrant of the city. The city's primary industrial area is bounded by Interstate 405, 159th Street, and Inglewood Avenue. The area with the second highest concentration of light industrial and manufacturing properties is located in and around the 15200 block of Grevillea Avenue. The entire area is bounded by Compton Boulevard, Hawthorne Boulevard, Interstate 405 and Inglewood Boulevard. The third cluster of industrial properties is located in and around the 4800 block of Compton Boulevard. The entire area is bounded by Rosecrans Avenue, Hawthorne Boulevard, Compton Boulevard and Inglewood Avenue. The abandoned and capped oil wells can be found mostly near the intersection of Inglewood Avenue and Rosecrans Avenue. Land use surrounding the commercial automotive, light industrial and manufacturing facilities tends to be mixed use residential and commercial. All the facilities are in close proximity to residential property.

Non-industrial sites such as oil production facilities, warehouses, school buildings, laboratories and residences may also contain hazardous substances. In addition, a portion of the City of Lawndale is located within the boundaries of the abandoned Lawndale Oil Field. The city of Lawndale has 25 capped and abandoned oil wells within its boundaries. Most of these abandoned oil wells were dry and capped immediately after drilling. A few were productive oil wells until the mid-1950s, when production ended and they were capped with cement per state regulations. These wells represent potential sources of hazardous materials. Figure G presents the locations of the abandoned oil wells. The Oil and Gas Division of the Department of Conservation is responsible for reviewing building projects above or near abandoned oil wells to determine if they must be reabandoned according to current Department specifications. Furthermore, if any abandoned or unrecorded wells are uncovered or damaged during excavation or grading, remedial plugging may be required. If such damage occurs, the Division's district office must be contacted. The Department of Conservation suggests that property owners avoid building over any abandoned well. The Department of Conservation Division of Oil and Gas should be contacted to determine required procedures in the event of a proposal that might disturb a well.

Hazardous Substance Transportation. The transportation of hazardous materials can pose a potential hazard to the community. Spills of hazardous materials in residential areas can result in exposures to the inhabitants above threshold limits. Two methods of transportation are addressed in this section: railroad and vehicular.

The southwest quadrant of Lawndale is transected by the Atchison Topeka and Santa Fe railroad. This facility, shown as the LA Harbor Line, is the main line between the harbor and the main industrial switching yard in Los Angeles. As

CITY OF LAWNSDALE
GENERAL PLAN

Material Type	Material Volume
Automotive (1)	4,294,071 gal
Gases (2)	26,844 cf
Fertilizer Products	600 lb
Hydrochloric Acid	1,200 gal
Liquid Nitrogen	142 gal
Isopropyl alcohol	110 gal
Oil	7,579 gal
Paint Products (3)	3,804 gal
Pesticides	55 gal
Liquid Propane	10,070 gal
Sodium Hydroxide	443 gal
Sodium Hypochlorite	2,500 gal
Solvent	1,428 gal
Sulfuric Acid	50 gal
Waste Oil	14,165 gal
Waste Paint and Thinner	275 gal

(1) Gasoline, fuel, kerosene, transmission fluid, antifreeze, engine coolant.

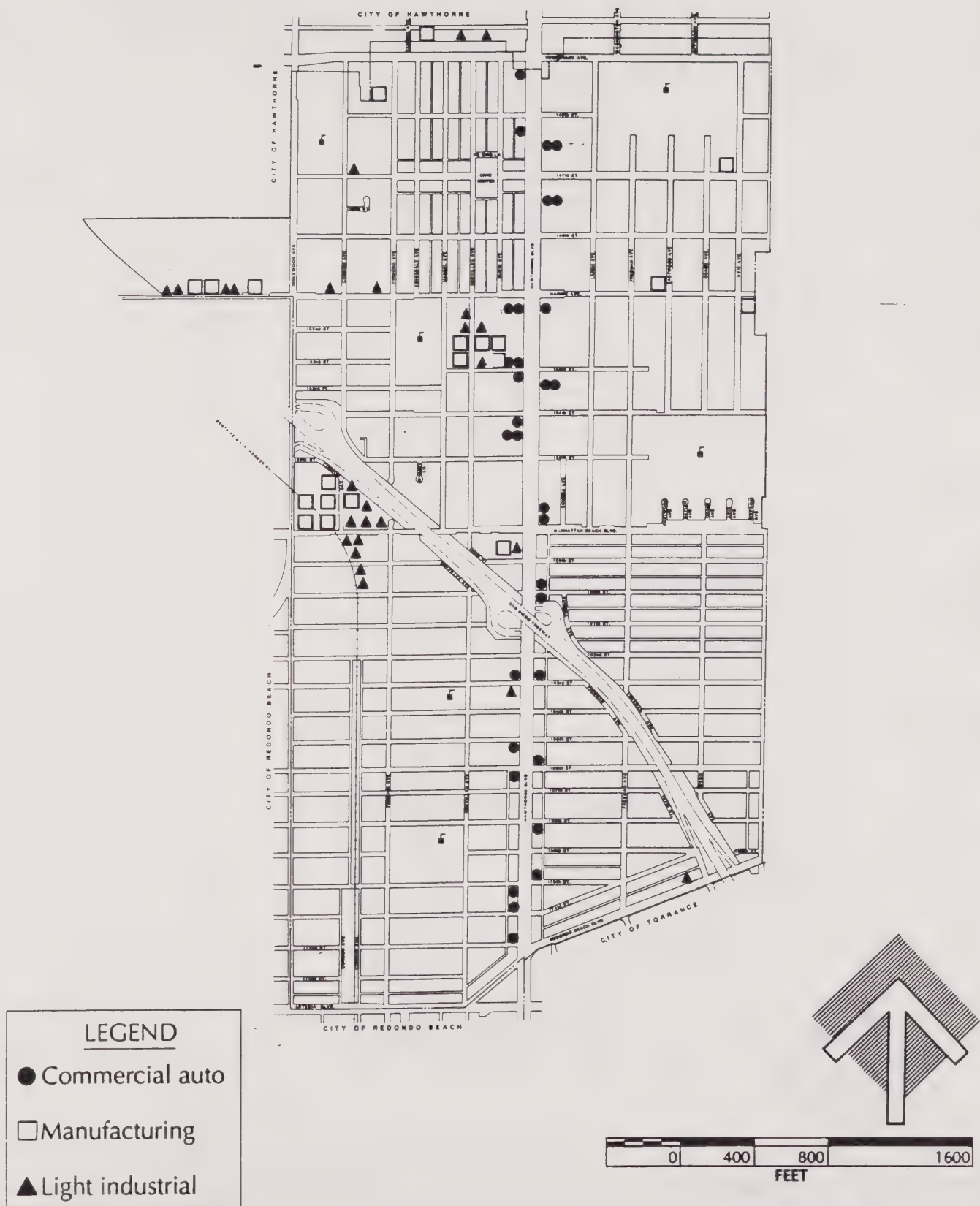
(2) Acetylene, argon, carbon, dioxide, helium, hydrogen, nitrogen, nitrous oxide, oxygen.

(3) Paint, lacquer, varnish, stain, primer, thinner.

Source: Hazardous Materials Business Plan and Inventory, County of Los Angeles Fire Department, 1991.

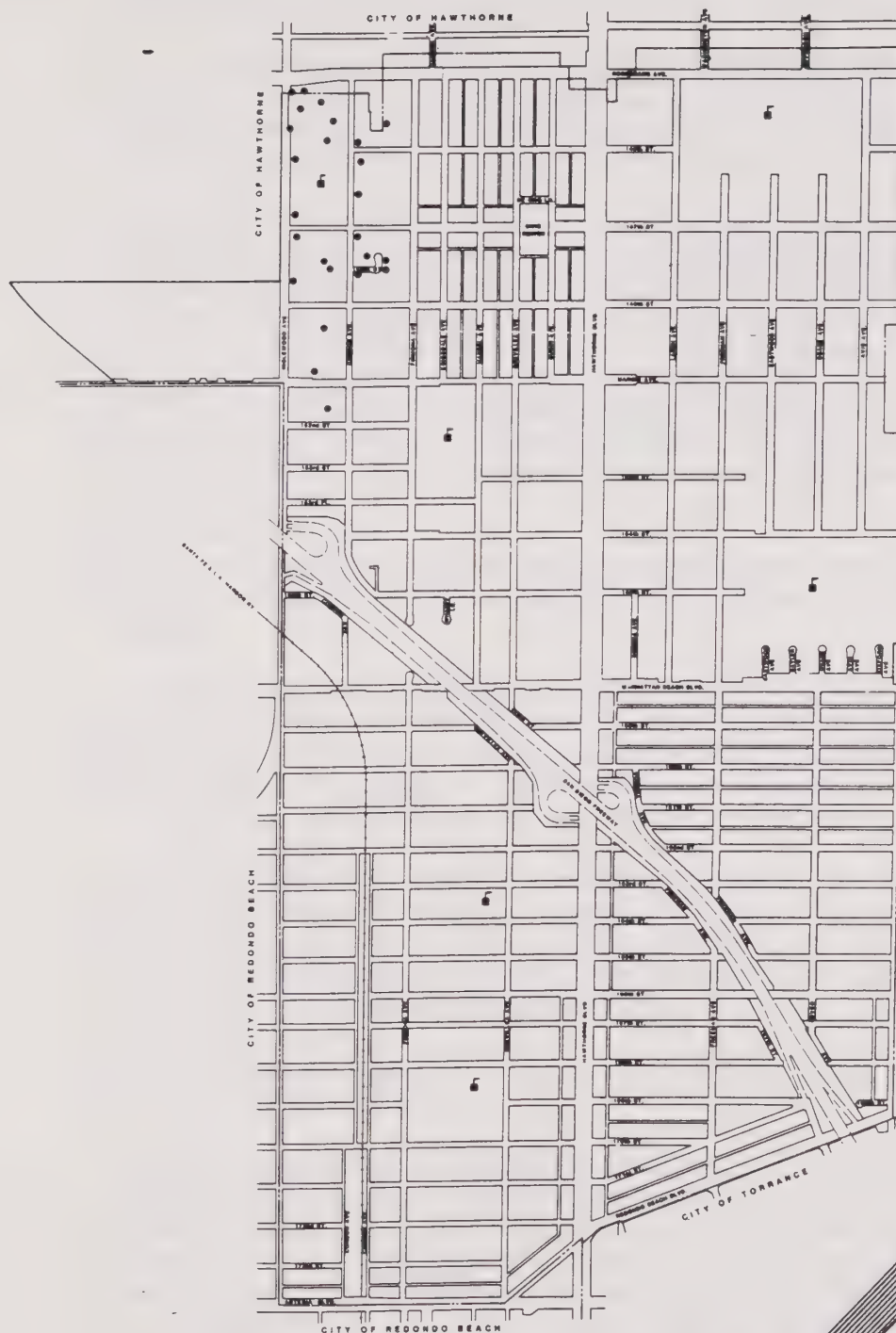
Hazardous Materials Stored on the
Site in the City of Lawndale

table 5



Hazardous Substance Sources Location

figure F



LEGEND

- Abandoned Oil Well Location

SOURCE: CA Dept. of Conservation, Div. of Oil and Gas, 11/91.

Abandoned Oil Well Locations

figure G

such, the railroad receives heavy train activity daily. Although trains have a limited speed through the City of Lawndale, train derailments have occurred in the past.

No designated truck routes for the transport of hazardous materials exist through the City of Lawndale. Trucks generally use some of the major streets in the city and the volume of truck traffic is relatively small. City speed limits further reduce the potential for accidents and spills of hazardous materials.

Interstate 405 transects the City of Lawndale, passing from the southeast corner of the city to the middle of the western boundary. This interstate receives heavy truck and vehicle traffic and is a designated route for the transportation of explosives and cargo tanks of fuming nitric acid, anhydrous hydrazine and liquid nitrogen tetroxide by the State of California. However, there are no designated stopping points for transporters of these materials within the vicinity of the City of Lawndale (CCR, Title 13). Many trucks traveling the freeway transport other types of hazardous materials in both bulk and containerized forms. The fire department has been involved in a number of overturned trucks and tankers in the past.

Hazardous Wastes

Hazardous wastes are generated from both industrial and non-industrial operations. This section describes the generating operations deemed likely within the City of Lawndale.

Generator Location/ Surrounding Land Use. Hazardous wastes may be generated by a variety of industrial and non-industrial practices. Facilities with the potential for the presence of hazardous materials include auto shops, light industrial facilities and manufacturing facilities. Non-industrial sites such as school buildings, laboratories and residences may also generate hazardous wastes.

In 1988, the most recent year for which data is available, the following industries generated and shipped hazardous wastes in the City of Lawndale: automotive shops, printing and manufacturing. Non-industrial facilities such as schools, laboratories, an insurance company and households also generated hazardous wastes (Los Angeles County 1988 Summary).

Figure G presents the locations of hazardous waste generating facilities within the City of Lawndale in 1988.

Automotive shops which generated hazardous wastes in 1988 within the city limits tended to be located along Compton Boulevard and in the 15200 block of Grevillea Avenue. Printing operations which generated hazardous wastes tended to be located in the northwest quadrant of the city. The manufacturing operations generating hazardous wastes were located on Compton Boulevard and South Aviation Boulevard. The Unified School District which generated hazardous wastes is located on 147th Street. Surrounding land use is generally mixed use residential.

Typical Hazardous Waste. A review of the State hazardous waste generator list indicates that there are no major hazardous waste generators within the city of Lawndale. In 1988, the latest data available, 62 tons of hazardous waste were generated and shipped by facilities within the City of Lawndale. Seventy one percent (71%) was generated by facilities with recurring waste shipments and twenty nine percent (29%) was generated by facilities as a one-time shipment (Los Angeles County 1988 Summary). Of the total waste, 8% was generated by



LEGEND

Generator Site

Hazardous Waste Generators

figure H

automotive operations, 9% was generated by printing operations, 22% was generated by administrative non-manufacturing facilities and 58% was generated by manufacturing facilities. A breakdown of waste types that were transported out of the City of Lawndale is presented in Table 6. Waste oil and solvents represented the largest volume of waste shipped.

Households also produce a variety of hazardous wastes, including paints, solvents, drain openers, cleaner, insecticides and motor oil. Cities are required to adopt a source reduction and recycling program which includes household hazardous waste. A feasibility study for the City of Lawndale will be completed in November 1991. Program implementation is expected in 1992.

Hazardous Waste Transportation. The transportation of hazardous waste can pose a potential hazard to the community. Spills of hazardous waste in residential areas can result in exposures to the inhabitants. The methods of transportation of hazardous wastes are the same as those for hazardous materials. See the Hazardous Substances section for a discussion of this issue.

Public Exposure

The risk of harmful public exposure to a hazardous material release is dependent upon the proximity of the release to the public, the characteristic of the material released and the amount of material released.

The majority of hazardous material users, generators or storers are located in four clusters within the city. Most of the light industrial and manufacturing properties are located in close proximity to residential areas. In addition, the transportation of hazardous materials occurs through residential areas. Therefore, in the event of a release there is a potential risk of exposure to the citizens of Lawndale.

Hazardous materials typically present in the City of Lawndale are flammable liquids; photochemical substances; compressed gases; asbestos-containing materials; pesticides; oily waste; aqueous waste; inorganic chemicals; and tank bottom waste. In the event of a release, these materials have the potential for causing explosions, fires and harmful effects to the public following exposure.

The amount of hazardous materials present within the City of Lawndale is not easily quantifiable. The volume of hazardous substance on a facility site at any one time varies by industry. Gasoline and diesel may be stored in large above or underground storage tanks. Liquefied petroleum gas would be expected to be stored in tanks or cylinders. Smaller container storage volumes would be expected for those materials which were not used in large quantities. Hazardous materials shipments passing on the Interstate 405 or the railroad increase the volume of hazardous materials which may be present. These sources of hazardous materials indicate that the volume of hazardous materials within Lawndale presents a risk of accidental release.

Emergency Response

Rapid and effective emergency response can minimize the risk of public exposure to a hazardous material release. It is for this purpose that the laws require preparation of contingency plans and business plans by facilities which store hazardous materials.

The Los Angeles County Fire Department has the responsibility for response to hazardous material releases in the City of Lawndale. The Fire Department has

Waste Type	Waste Volume (tons)
Solvent	16.57
Aqueous waste	3.38
Oily Waste	21.11
Organic	3.11
Photochemical	0.28
Inorganic	3.0
Adhesives	0.4
Laboratory	0.05
Tank Bottom Waste	2.03
Containers	11.98
TOTAL	61.91

Hazardous Waste Generated
in the City of Lawndale 1988

table 6

prepared for its emergency response responsibilities by creating a database identifying those businesses which store hazardous materials.

Each-engine company is required to inspect every business within its district annually to update this database. The Fire Prevention Division of the Fire Department is responsible for ensuring that all such businesses have submitted business plans and contingency plans detailing the business' emergency response procedures.

The County Fire Department has three hazardous materials squads to service the entire County of Los Angeles. These squads respond to releases of hazardous materials which present a threat to the public. The engines are equipped with data terminals which have access to the hazardous material business database. Typically, two fire engines, a paramedic squad and a hazardous material squad would respond to an emergency hazardous materials release. Law enforcement officials would be relied upon in the event of an evacuation.

Public Education

The Fire Prevention Division of the Los Angeles Fire Department provides hazardous materials training and community awareness presentations for the education of the public. These programs are available to the City of Lawndale.

Conclusion

The presence of hazardous materials within the City of Lawndale presents a potential risk to the public in the event of a hazardous materials release. The proximity of residential areas to facilities known to manage hazardous materials, the types of such materials expected to be present and the volume of such materials combine to increase the risk of harmful public exposure in the event of a release. The Los Angeles County Fire Department has procedures in place to deal with emergency response to such incidents. However, there are steps which the City of Lawndale can take to better prepare the Fire Department and the community to an accidental release of hazardous materials. These measures include improving City emergency response programs, including hazardous materials awareness into community planning activities and working to reduce the amount of hazardous materials in the community. Specific steps for implementing these policies are presented later in this Safety Element.

Goals and Policies

The basic objective of the seismic portion of the Safety Element is to reduce the risk of hazard resulting from future seismic and related events. A seismic event is directly associated with faulting and earthquake activity. The area encompassed by the City of Lawndale does not contain faults but the City would be affected by fault activity outside of the community, and in the regional area. The seriousness of seismic risk to public safety is a function of local seismic conditions, as well as public awareness of the hazards present, and the effectiveness of mitigation utilized to reduce risk resulting from seismic hazards.

The fire portion of the Safety Element provides for the safety of community from fire and manmade or natural disasters. The ability to provide fast and effective emergency response is limited by the City's water flow, accessibility and width of streets.

The hazardous materials portion of the Safety Element addresses the protection of the community from any unreasonable risks associated with the presence of hazardous materials (hazardous substances and hazardous wastes) in the

community. These substances can be released to the environment as a result of fires, spills, accidents, or emissions. As such, they potentially pose acute and chronic health risks to individuals who live and work in the city. The risk of public exposure to a hazardous material release is dependent upon the proximity of the release to humans, the characteristics of the material released and the amount of material present. Most of the light industrial and manufacturing properties are located in proximity to residential areas. In addition, hazardous materials transporters pass through residential communities during shipment of hazardous substances and wastes. The presence of Interstate 405 and the railroad tracks passing through the city increases the volume of hazardous materials shipments through Lawndale. There is a potential risk of public exposure to a hazardous material release based upon the proximity to areas of hazardous materials storage and transportation routes.

The following goals and policies provide direction for the achievement of seismic, fire, and hazardous materials safety. The policies will be carried out through implementation programs utilizing public and private resources for the mitigation of safety hazards. The policies and directives encompass both existing and future development.

Seismic and Safety: Goal 1

The City of Lawndale will ensure the protection from loss of life, injury, property damage and reduction of economic and social dislocation associated with seismic and other emergency events.

Policies

Policy 1a

The City of Lawndale will reduce the probability of the occurrence of loss of life, injury, and property damage during seismic events through increased public awareness and disaster preparedness.

Policy 1b

The City of Lawndale will incorporate the provisions of the County of Los Angeles' Emergency Operations Plan into the City's emergency response procedures to maintain consistency and encourage cooperation.

Policy 1c

The City of Lawndale will minimize potential seismic risk to both existing and future structures.

Policy 1d

The City of Lawndale will provide the community with the knowledge of the potential danger resulting from seismic events.

Policy 1e

The City of Lawndale will incorporate seismic hazard awareness as an integral part of community planning activities.

Policy 1f

The City of Lawndale will reduce the probability of the occurrence of loss of life, injury and property damage from fire and other natural or manmade emergencies or disasters through public education and emergency preparedness.

**Hazardous
Materials:
Goal 2**

The City of Lawndale will ensure the protection from loss of life, injury, and property damage associated with the accidental dispersal of hazardous materials.

Policies**Policy 2a**

The City of Lawndale will ensure the protection of life and property from the hazards of release of hazardous materials to the environment.

Policy 2b

The City of Lawndale, recognizing the potential risks of hazardous materials, will incorporate hazardous material awareness as an integral part of community planning activities.

Policy 2c

The City of Lawndale recognizes the plight of California's increasing waste problem and will actively pursue programs for decreasing the presence of hazardous materials generated from the City's households and businesses.

Implementation Programs**1. Seismic
and Safety****1.1 Evacuation Routes**

The City of Lawndale shall cooperate with neighboring communities in developing local and inter-city evacuation routes.

1.2 Emergency Operations Plan

The City of Lawndale shall review and assess the County disaster preparedness program and Emergency Operations Plan (EOP) for application to the City of Lawndale. Applicable sections of these plans shall be incorporated into the City's Safety Element. Department heads in City Hall shall be familiar with these plans and understand their roles during seismic and other disasters.

1.3 Public Awareness

The City of Lawndale shall make the Lawndale EOP available to all its citizens by distributing copies to public institutions (such as libraries and schools) for educational purposes and to encourage awareness. Public seminars shall be organized to further describe procedures in the Plan and to address questions and concerns of the Lawndale citizens.

1.4 Structural Standards

The City shall ensure that new structures be designed and constructed to meet minimum performance standards in accordance with the latest Uniform Building Code (UBC 1988). The City building code shall vary according to the rate of ground acceleration associated with the three seismic zones identified in the technical appendix.

1.5 Groundshaking Evaluation

The City shall require that soils engineering reports, which are submitted for development or redevelopment projects within the seismic hazard zone III, include an evaluation for the potential of groundshaking hazards, and be evaluated by a licensed geologist or geotechnical engineer.

1.6 Liquefaction Evaluation

The City shall require that soils engineering reports, when submitted for development or redevelopment projects within any seismic zone, include an evaluation for the potential of liquefaction at any site where ground water is observed within the upper 50 feet of sediments.

Soils reports shall include a discussion of the magnitude of earthquake shaking, include specific information relating to vertical and horizontal maximum acceleration that could be anticipated at the site, and if the site is susceptible to long or short period horizontal and vertical ground acceleration and make suggestions for possible mitigation if necessary.

1.7 Site Inspections

The City shall initiate a detailed site inspection program to identify existing non-residential facilities that do not currently meet modern seismic and construction standards established in the latest Uniform Building Code. Critical structures such as schools, hospitals, emergency communication centers, important utility centers, police and fire facilities, and bridges and overpasses shall be retrofitted as soon as possible. The existing demolition-rehabilitation program shall be aggressively continued by the City so that old and hazardous structures can be eliminated.

1.8 Hazardous Industries

The City shall adopt an ordinance defining hazardous industries or facilities subject to serious accidents resulting from strong earthquakes. The City Engineer shall be given the authority to: (a) conduct an inventory and selective evaluation of the seismic vulnerability of potentially hazardous buildings in high seismic shaking zones in the City, (b) identify building occupancy type, value and age, and (c) establish priorities for the renovation, demolition, or occupancy reduction of identified hazardous buildings.

1.9 Educational Program

The City shall develop an educational program for use by schools, developers, and the public at large, covering hazards, abatements, and emergency plans and procedures. Earthquake disaster simulations shall occur at regular intervals at a school and community level in order to practice the proper procedures established in the Lawndale Emergency Operations Plan.

1.10 Volunteer Program

The City of Lawndale shall develop, implement and support community programs that train volunteers to assist police, fire and civil defense personnel in how to perform effectively after an earthquake, or other disaster.

1.11 Earthquake Insurance Program

The City of Lawndale shall advocate improved earthquake insurance programs.

1.12 Relocation Assistance

The City of Lawndale shall provide relocation assistance to persons and businesses temporarily or permanently dislocated from hazardous old buildings due to action by the city.

1.13 Seismic Hazard Restrictive Zoning

The City of Lawndale shall adopt an overlay zone, or other restrictive zoning with selective land use in areas of high seismic hazard (e.g., high liquefaction).

1.14 Construction Design

The City of Lawndale shall require that new construction be designed to withstand the ground shaking expected for Seismic Zones I, II, and III.

1.15 Seismic Hazard Zoning

The City of Lawndale shall consider including seismic and geologic hazards in the City's zoning ordinance. Land use allocations shall be compatible with the various degrees and types of geologic and seismic risk within the City.

1.16 Liquefaction Protection

The City of Lawndale shall monitor ground water level in all potential liquefaction areas. If the water levels reach within 40 feet of the surface, the City Engineer shall require appropriate foundation design or other mitigations to alleviate the hazard to large structures as necessary. If the water levels reach within 15 feet of the surface the City engineer shall require special designs for other structures as necessary.

1.17 Critical Facility Design

The City of Lawndale shall advocate detailed site evaluations and improved seismic design and construction standards for linear system nodal facilities providing critical services such as power distribution stations, water supply, and communication centers.

1.18 Fire Safety

The City of Lawndale shall continue its educational and action programs regarding prevention of fires, clean-up of sites, first-aid procedures, and evacuation routing.

2. Hazardous Materials Safety**2.1 Hazardous Waste Generator Survey**

The City of Lawndale will conduct a survey of businesses generating hazardous wastes and will review the adequacy of emergency response arrangements between those facilities and local police and fire departments for hazardous waste releases.

2.2 Emergency Preparedness Review

The City of Lawndale will conduct annual reviews of its existing emergency preparedness and evacuation plan to assess its adequacy in dealing with the potential risks of hazardous materials.

2.3 Hazardous Materials Routes

The City of Lawndale will minimize the risk of accidental releases of hazardous materials from transportation accidents by designating routes through the community for the transport of hazardous materials.

2.4 Emergency Operations Plan Exercises

The City of Lawndale will conduct annual community emergency operations plan exercises to assess the effectiveness of its emergency operations plan.

These exercises will include mock spill events and evacuation of public buildings.

2.5 Emergency Operations Plan Review

The City of Lawndale will update its community emergency operations plan annually by using information provided in the database prepared by the Los Angeles County Fire Department in order to assess the impact on emergency response needs from new hazardous materials management facilities.

2.6 Contingency Plan Review

The City of Lawndale will review the contingency plans that hazardous waste generators have submitted to the Fire Department, and these plans will be incorporated into the community emergency response plan.

2.7 Hazardous Material Release Prevention

The City of Lawndale Fire Department will follow up with businesses after a hazardous material release which affects human health or the environment has occurred to verify that the incident cannot recur.

2.8 Well Abandonment Review

The City of Lawndale will review the information packet available from the Department of Conservation's Division of Oil and Gas entitled "Construction Project Site Review and Well Abandonment Procedure." Applicable sections will be incorporated into the building department's review process for new development.

2.9 Well Reabandonment

The City of Lawndale will ensure that new development over or in the proximity of a previously abandoned oil well be reviewed by the Oil and Gas Division of the Department of Conservation to determine whether the well needs to be reabandoned.

2.10 Community Planning Priority Ranking

The City of Lawndale will use the following priority ranking in planning community development to minimize the potential risks resulting from the exposure to hazardous materials: (1) loss of life or injury, (2) damage to property, (3) litigation, (4) excessive maintenance and (5) other social and economic costs.

2.11 Adjacent Land Use Zoning

The City of Lawndale Planning Department will minimize exposure of citizens to hazardous materials by controlling the type, location and intensity of development adjacent to sites and facilities which produce, use or store hazardous materials.

2.12 Hazardous Materials Zoning

The City of Lawndale will control the presence of hazardous materials by limiting the location of new facilities which manage hazardous materials to those areas zoned for commercial and industrial uses.

2.13 Land Use Planning

The City of Lawndale will continuously integrate new data on hazardous materials use and storage areas into its review of land use proposals,

applications and enforcement of development standards to minimize the potential risks.

2.14 Facility Inspections

The City of Lawndale will increase the number of facilities that are inspected annually by the fire department to increase the database on existing hazardous materials in the community.

2.15 Underground Tank Permits

The City of Lawndale will verify that all underground storage tanks are permitted by the Fire Department.

2.16 Hazardous Materials Education

The City of Lawndale will educate the community as to the presence and effects of hazardous materials in the vicinity, through presentations at public forums.

2.17 Public Awareness

The City of Lawndale will inform and educate the public on the risks from hazardous materials in the community, and the methods available for hazard abatement, prevention, mitigation and avoidance through development of literature and presentations.

2.18 Rail Shipment Notification

The City of Lawndale will require notification of hazardous material shipments by rail within the city limits.

2.19 Public Presentations

The City of Lawndale will educate the community as to the presence and effects of hazardous materials in the vicinity through presentations at local schools.

2.20 Hazardous Material Survey

The City of Lawndale City Council should authorize the appropriate agency to conduct a survey to evaluate potential hazards and to recommend guidelines for the safe handling, processing, manufacture, or storage of dangerous materials.

2.21 Transportation Routes

The City of Lawndale should require that vehicles carrying hazardous materials be routed along transportation corridors that reduce public exposure to risk.

2.22 Public Building Asbestos Control

The City of Lawndale will reduce public exposure to asbestos by requiring the identification and control of asbestos-containing materials during renovation of public buildings.

2.23 Property Transfer Asbestos Control

The City of Lawndale will minimize asbestos exposure by requiring the identification and control of asbestos-containing material in properties prior to a property transfer.

2.24 Property Transfer Soils Investigation

The City of Lawndale will improve the environment by requiring the identification and remediation of soil contamination in properties such as light industrial and manufacturing prior to a property transfer.

2.25 Source Reduction Program

The City of Lawndale will prepare, review and update the City source reduction and recycling program for solid hazardous wastes, including household hazardous wastes.

Glossary of Terms

Acceleration: Rate of change of velocity.

Active fault: A fault that has slipped in the recent geological past and can be expected to move again in the future. Recent geological past is interpreted to be a period of 11,000 years.

Alluvium: Geologically recent surficial deposits, which were deposited by a stream or other body of running water and have not undergone significant cementation or consolidation. Typically gravels, sands, silts and clays.

Alquist-Priolo Special Studies Zones Act (1972): This act was initiated to regulate development near active faults so as to mitigate the hazard of surface fault rupture. Under this act special studies zones were delineated along known active faults.

Anticline: A fold, generally convex upward, whose core contains the stratigraphically older rocks.

Breccia: A coarse-grained clastic rock, composed of angular broken rock fragments held together by a mineral cement or in a fine-grained matrix.

Business plan: A written document that contains an inventory of all hazardous materials, emergency response procedures for a release or threatened release of hazardous materials, and procedures for the mitigation, prevention or abatement of hazards to persons, property or the environment.

Contingency plan: A written document that sets forth comprehensive policies and procedures for emergency response.

Earthquake: Perceptible trembling to violent shaking of the ground, produced by the sudden displacement of rocks below and at the earth's surface.

Effective stress: The average normal force per unit area transmitted directly from particle to particle of a soil or rock mass.

Epicenter: The geographical location of the point on the surface of the earth that is vertically above the earthquake focus. It is near the highest intensity of groundshaking.

Fault: A plane of breakage in rock or soil, along which significant offsetting of the two sides of a plane occurred due to tectonic forces.

Fault gouge: Soft, uncemented pulverized clayey or clayeylike material found along some faults or between the walls of a fault, and filling or partially filling a fault zone.

Fault system: A fault set or sets that have the same characteristics of movement.

Fault zone: A fault that is expressed as a zone of numerous small fractures or of breccia or fault gouge.

Focus: The point within the earth which marks the origin of the elastic waves of an earthquake.

Floodplain: Any flat or nearly flat lowland that borders a stream and may be covered by its waters at flood stages.

Ground Rupture: Lateral or vertical fault displacement occurring in the top several feet of rock or soil and extending to a fault plane at depth. Due to movement along that fault or adjacent faults.

Groundshaking: Shaking motions of the soil or rock during an earthquake.

Hazardous material: An injurious substance or waste, including pesticides, herbicides, toxic metals and chemicals, liquified natural gas, explosives, volatile chemicals and nuclear fuels.

Hazardous substance: A hazardous material that is not a waste.

Hazardous waste: An injurious waste or waste-like material.

Incident: An accident, release, spill, explosion or other event which results in the release of a hazardous material to the environment.

Intensity: The degree or strength of shaking at a specified place, rated by the severity of damage at that location.

Landslide: A general term covering a wide variety of mass movement, involving downslope transport, under gravitational influence, of soil and rock material *en masse*.

Left-lateral fault movement: Generally horizontal movement in which the block across the fault from an observer has moved to the left.

Liquefaction: The process in which a soil deposit or layer in a deposit is transformed into a dense fluid which will flow as a liquid when unconfined. It occurs principally in loose saturated sands and silts when they are shaken by an earthquake.

Magnitude: The rating of a given earthquake related to the strain energy released by it as measured on seismograms.

Offsite: The horizontal and/or vertical distance between two parts of a disrupted bed previously joined.

Perched water table: The water table of unconfined ground water separated from an underlying main body of ground water by an unsaturated zone.

Pore pressure: The stress transmitted by the fluid that fills the voids between particles of soil or rock mass.

Potentially active fault: A fault that is considered suspect because of identified offset of Quaternary sediments that are less than 1.5 million years old.

Recurrence Interval: The average length of time between earthquakes of a specific magnitude.

Remediation: Activities resulting in the cleanup or encapsulation of a hazardous material spill.

Right-lateral fault movement: Generally horizontal movement in which the block across from the observer has moved to the right.

Seiche: Earthquake induced waves in lakes or ponds.

Seismic: Pertaining to an earthquake or earth vibrations.

Seismograms: An instrument that writes a permanent continuous record of earth vibrations.

Slip: The relative displacement of formerly adjacent points on opposite sides of a fault.

Source reduction: Activities at the source of the generation of a solid or hazardous waste resulting in a decrease in the amount of waste generated.

Strain: The change in the shape or volume of a body as a result of stress.

Strike: The direction or trend taken by a fault surface.

Strike-slip: In a fault, the component of movement or slip that is parallel to the strike of the fault.

Structural province: A region whose geologic structure differs significantly from that of adjacent regions.

Structure: The general disposition, attitude, arrangement, or relative positions of the rock masses of a region or area.

Tectonic: Pertaining to rock structure resulting from deformation of the earth's crust.

Threshold limit: Concentration of a substance which results in an adverse exposure to an individual.

Threshold quantity: See threshold limit.

Thrust: An overriding movement of one crustal unit over another.

Tsunami: Sea wave generated by a submarine earthquake, landslide, or volcanic action.

Unconsolidated material: Sediment that is loosely arranged or unstratified, and whose particles are not cemented together.

Water table: The surface below which sediments are saturated and above which they are unsaturated. The surface represents the location where pressure is equal to atmospheric pressure.

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NOISE ELEMENT

IV. HAZARD MANAGEMENT

2. Noise Element

Introduction

Overview

A noise element is related to land use and housing elements in that its key objective is to provide noise exposure information for use in land use planning. When integrated with a land use element, a noise element will show acceptable land uses in relation to existing and projected noise contours. Since residential land uses are the most noise sensitive, the noise exposure information should be considered when planning new housing.

The key feature of a noise element is the quantification of the community noise environment in terms of noise exposure contours of both existing and future transportation activities. The contours serve as guidelines to achieve noise compatible land uses to minimize the exposure of community residents to excessive noise and to provide baseline noise levels.

Authority

A noise element as well as other general plan policies and implementing ordinances (zoning codes, noise ordinances, etc.) are effective tools in noise reduction and mitigation. Section 65302(g) of the California Government Code requires that each city have a noise element as part of the General Plan. The Lawndale Noise Element follows the guidelines adopted by the Office of Noise Control, pursuant to Section 46050.1 of the Health and Safety Code.

State guidelines are very specific about the content of a General Plan noise element. The Government Code (Section 65302(F)) states that the noise element should be prepared according to guidelines established by the Department of Health Services. At a minimum, the Government Code requires the element to analyze noise levels for the following:

- Highways and Freeways;
- Primary arterial and major local streets;
- Passenger and freight railroad operations and ground rapid transit systems;
- Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation;
- Local industrial plants, including but not limited to railroad classification yards; and

- Other ground sources identified by the local agencies as contributing to the community noise environment.

Organization

This Noise Element is organized into the major categories of Introduction, Assessment, and Goals and Policies. The assessment begins with an overview of noise, followed by a general discussion of related plans and programs. The assessment concludes with an analysis of noise in the City of Lawndale and identifies major existing and buildout year (2010) noise sources. The final section of the Noise Element deals with goals and policies designed to provide an environment free from excessive or harmful noise.

Assessment

One of the most prominent consequences of the increasing complexity of urban and suburban living is our increased exposure to noise. Aircraft, automobiles, trucks, railroads, construction equipment, factories and even home appliances contribute to the noise environment of modern life. Generally, motor vehicles are the most pervasive contributors to urban noise. Consequently, the expanding developments in cities produce a corresponding increase in traffic, which in turn leads to increased noise levels. Other major noise sources common in the urban and suburban environment are power gardening equipment, amplified music, power tools and air-conditioners. Table 1 is a summary of noise sources considered as noisy by a survey of 1200 people. Table 2 identifies familiar noise sources and their approximate noise level (in decibels).

For most people, the usual consequences of noise are associated with speech interference, distractions at home and at work, disturbance with rest and sleep, and the disruption of recreational pursuits. The long term effects of noise are physical as well as psychological. Physical effects may include headaches, nausea, irritability, high blood pressure, changes in the heart and respiratory rate and increased muscle tension. Prolonged exposure to high noise levels may result in hearing damage. Psychological effects may result from the stress and irritability associated with a change in sleeping pattern due to noise. In addition, noise may adversely affect property values or job performance and can sometimes lead to accidents and injuries. Table 3 is a summary of sound levels identified by the Environmental Protection Agency as requisite to protect the public health and welfare with a margin of safety.

Noise is generally defined as unwanted or annoying sound, and may be considered as having an adverse effect on the environment. The State of California recognizes the relationship between noise and noise sensitive land uses, and emphasizes the need to control noise through land use regulation.

Airborne sound is a rapid small scale fluctuation of the instantaneous air pressure above and below the local barometric pressure. Sound levels are usually measured and expressed in decibels (dB). Most sounds that we hear in the environment do not consist of a single frequency, but rather a mixture of frequencies, with each frequency differing in sound level. The intensities of each frequency add to generate sound. The method commonly used to quantify environmental sounds consists of evaluating all the frequencies of a sound according to a weighting system that reflects the fact that human hearing is less sensitive at low frequencies and at extremely high frequencies than at the mid-range frequencies. This is called

Source	Percentage
Motor Vehicle	55
Aircraft	15
Voices	12
Radio and TV Sets	2
Home Maintenance Equipment	2
Construction	1
Industrial	1
Other Noises	6
Not Ascertained	8

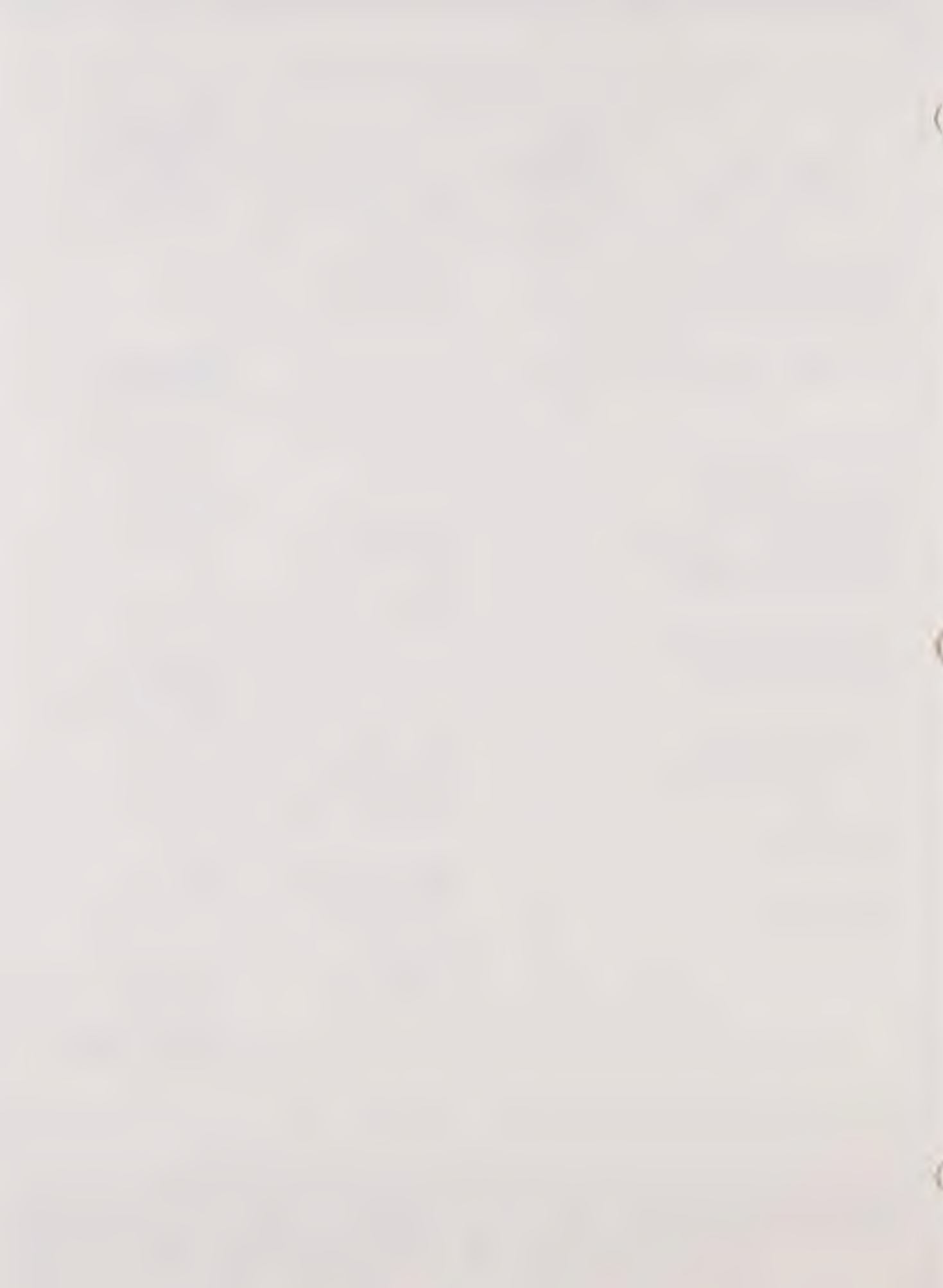
Source: Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, U.S. Environmental Protection Agency, March 1974.

Percent Contribution of Each Source Identified
by Respondents Classifying Their Neighborhood
as Noisy (72% of 1200 Respondents)



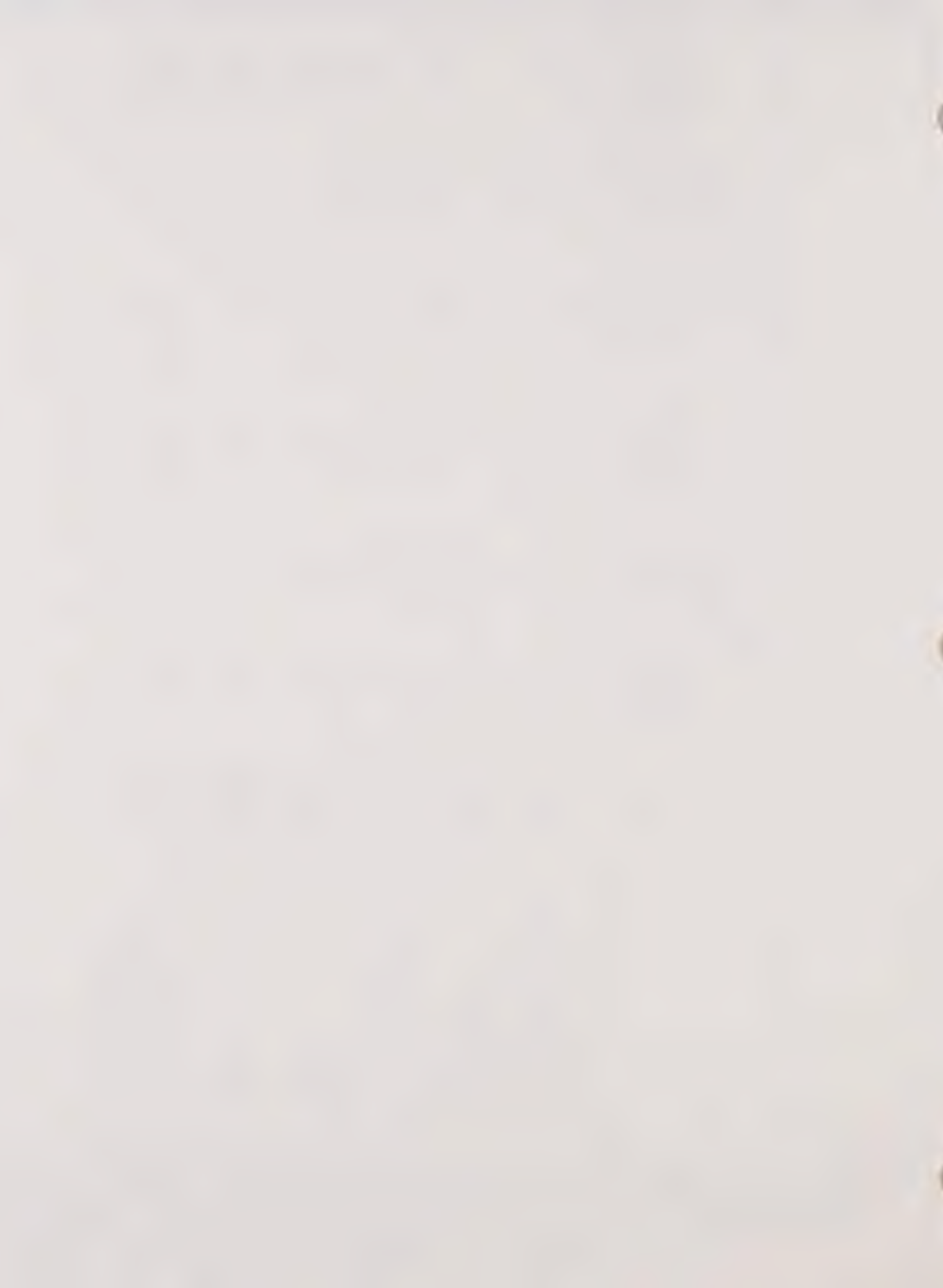
Noise Source (at a Given Distance)	Scale of A-Weighted Sound Level in Decibels	Noise Environment	Human Judgement of Noise Loudness (Relative to a Reference Loudness of 70 Decibels*)
Military Jet Take-off with After-burner (50 ft)	140	Carrier Flight Deck	
Civil Defense Siren (100 ft)	130		
Commercial Jet Take-off (200 ft)	120		
Pile Driver (50 ft)	110	Rock Music Concert	<u>Threshold of Pain</u> *32 times as loud
Ambulance Siren (100 ft)	100	Boiler Room Printing Press Plant	<u>Very Loud</u> *8 times as loud
Newspaper Press (5 ft)			
Power Lawn Mower (3 ft)			
Motorcycle (25 ft)	90		*4 times as loud
Propeller Plane Flyover (1000 ft)			
Diesel Truck, 40 mph (50 ft)	80	High Urban Ambient Sound	*2 times as loud
Garbage Disposal (3 ft)			
Passenger Car, 65 mph (25 ft)			
Living Room Stereo (15 ft)	70	Data Processing Center Department Store	<u>Moderately Loud</u> *70 dB (Reference Loudness)
Vacuum Cleaner (3 ft)			
Electronic Typewriter (10 ft)			
Normal Conversation (5 ft)	60		*1/2 as loud
Air Conditioning Unit (100 ft)			
Light Traffic (100 ft)	50	Private Business Office	*1/4 as loud
Bird Calls (distant)	40	Lower Limit of Urban Ambient Sound	<u>Quiet</u> *1/8 as loud
Soft Whisper (5 ft)	30	Quiet Bedroom	
	20	Recording Studio	<u>Just Audible</u>
	10		<u>Threshold of Hearing</u>
	0		

Sound Levels of Typical Noise Sources and Noise Environments (A-Weighted Sound Levels)



	Measure	Indoor		Outdoor		
		Activity Interference	Hearing Loss Consideration	To Protect Against Both Effects(b)	Activity Interference	Hearing Loss Consideration To Protect Against Both Effects(b)
Residential with Outside Space and Farm Residences	L_{dn} $L_{eq}(24)$	45	70	45	55	55
Residential with No Outside Space	L_{dn} $L_{eq}(24)$	45	70	45		
Commercial	$L_{eq}(24)$	(a)	70	70(c)	(a)	70(c)
Inside Transportation	$L_{eq}(24)$	(a)	70	(a)		
Industrial	$L_{eq}(24)(d)$	(a)	70	70(c)	(a)	70(c)
Hospitals	L_{dn} $L_{eq}(24)$	45	70	45	55	55
Educational	$L_{eq}(24)$ $L_{eq}(24)(d)$	45	70	45	55	55
Recreational Areas	$L_{eq}(24)$	(a)	70	70(c)	(a)	70(c)
Farm Land and General Unpopulated Land	$L_{eq}(24)$				(a)	70(c)

Yearly Average* Equivalent Sound Levels Identified as Requisite to Protect the Public Health and Welfare With an Adequate Margin of Safety



Code:

a Since different types of activities appear to be associated with different levels, identification of a maximum level for activity interference may be difficult except in those circumstances where speech communication is a critical activity.

b Based on lowest level.

c Based only on hearing lost.

d An Leq(8) of 75 dB may be identified in these situations so long as the exposure over the remaining 16 hours per day is low enough to result in a negligible contribution to the 24-hour average, i.e., no greater than an Leq of 60 db.

Note: Explanation of identified level for hearing loss: the exposure period which results in hearing loss at the identified level is a period of 40 years.

*Refers to energy rather than arithmetic averages.

Source: Information levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, U.S. Environmental Protection Agency, March 1974.

Yearly Average* Equivalent Sound Levels Identified as
Requisite to Protect the Public Health and Welfare
With an Adequate Margin of Safety

table 3 (continued)

"A" weighting, and the decibel level measured is called the A-weighted sound level and is denoted dB(A).

Although the A-weighted sound level may adequately show the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources that create a relatively steady background noise in which no particular source is identifiable. Noise measurement metrics such as Day-Night Average Sound Level (Ldn) and Equivalent Sound Level (Leq) have been developed to quantify sound over time and are widely accepted. Definitions of terms commonly used in environmental acoustics are defined in the Definitions section.

Related Plans and Programs

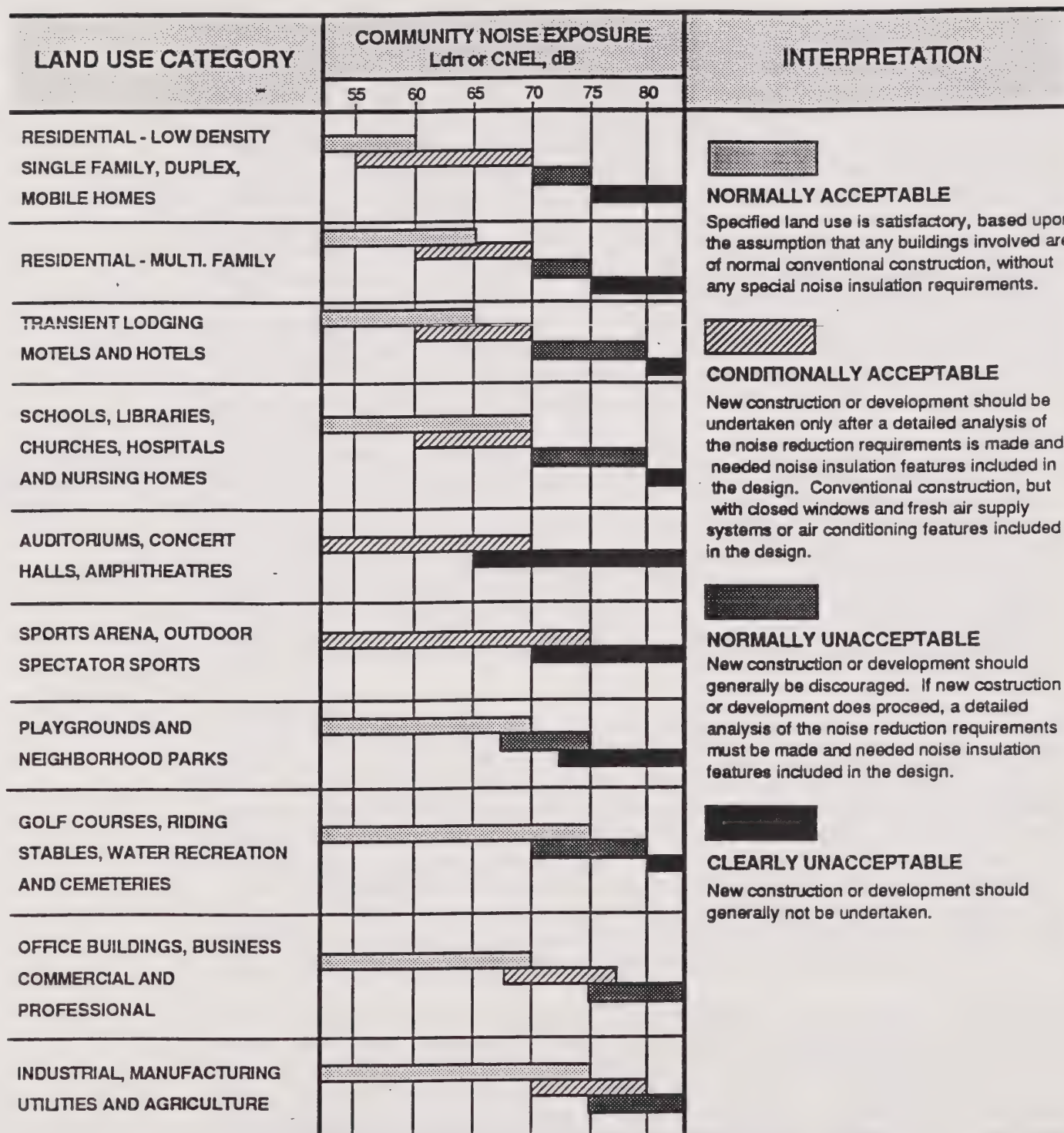
The Noise Control Act of 1972 (PL 92-574) established a national policy "to promote an environment for all Americans free from Noise that jeopardizes their public health and welfare." The Act provides for a division of powers between the Federal, state and local governments, in which the primary Federal responsibility is for noise source emission control, with the states and other agencies retaining the rights to control noise sources and the level of noise within their communities and jurisdiction. The Noise Control Act was supplemented by the Quiet Communities Act of 1978 (PL 95-609).

As a result of the Federal-Aid Highway Act of 1970, the Federal Highway Administration (FHWA) is concerned with traffic and construction noise associated with Federal-Aid Highways. In general, the noise policy is applicable to new highways, but the FHWA is also concerned with noise associated with changes to the horizontal or vertical alignment of existing highways. The principle mitigation measure has been placement of barriers at noise sensitive locations. In the State of California, the California Department of Transportation (Caltrans) has implemented a retrofit program to place noise barriers adjacent to noise sensitive locations along interstate highways.

A number of federal and state agencies have prepared guidelines that identify standards and regulations concerning noise compatibility in the work place and in residences. The California Department of Health Services Office of Noise Control and the U.S. Department of Housing and Urban Development have identified standards and regulations concerning noise mitigation and land use compatibility. The former published the Guidelines that are the basis for the preparation of this Element. Figure A summarizes the land use compatibility standards adopted by the Office of Noise Control.

California Administrative Code, Title 24, Section 3501, Sound Transmission Control, identifies minimum noise insulation performance standards to protect persons within new hotels, motels, dormitories, long-term care facilities, apartment houses, and dwellings other than detached single family dwellings from the effects of excessive noise. The Code requires that residential new structures located where the CNEL or Ldn exceeds 60 dB(A) must have an acoustical analysis performed to ensure that the proposed design will limit the interior noise level to 45 dB(A) or below in any habitable room.

The objective of noise and land use compatibility guidelines are to provide an acceptable community noise environment and to minimize noise related complaints. Figure A is an example of noise compatibility guidelines developed by the State of



Source: California Department of Health Services Noise Element Guidelines, 1987.



California Office of Noise Control which the City of Lawndale may consider adopting to evaluate the compatibility between land uses and future noise levels. The compatibility guidelines are used in conjunction with the future noise exposure contours to identify projects or activities which may require special treatment to minimize noise exposure. The recommended noise metric to be used is the Community Noise Equivalent Level (CNEL). CNEL is the noise metric currently specified in the State Aeronautics Code for evaluation of noise impacts in aircraft operations. Additionally, CNEL is specified in the State Sound Transmission Control Standards for new multifamily residential structures as well as in the State Guidelines for the preparation and content of Noise Elements. According to the guidelines, a land use or proposed project in the "Normally Acceptable" category will be considered compatible with the noise levels indicated in Figure A without special noise abatement measures. A land use or proposed project in an area that is "Conditionally Acceptable" should only be allowed following an acoustical study which recommends site-specific noise attenuation measures that can effectively reduce interior and exterior noise exposure to acceptable levels.

Highways and Vehicular Traffic

The major source of noise in the City of Lawndale is vehicular traffic, which includes automobiles, trucks, buses and motorcycles. The level of vehicular traffic noise varies with the volume of traffic, the percent of trucks, the speed of traffic, and the distance from the centerline of the roadway. Noise generated by vehicular traffic is greatest along I-405, Hawthorne Boulevard, Inglewood Avenue, Prairie Avenue, Rosecrans Avenue, Marine Avenue, Manhattan Beach Boulevard, 166th Street, Redondo Beach Boulevard and Artesia Boulevard. Noise-sensitive land uses such as residences, hotels and motels, and schools are mostly affected. Vehicular traffic noise will also dominate the noise environment in the year 2010.

Modeling

The Federal Highway Administration's STAMINA 2.0 Traffic Noise Prediction Model was used to calculate noise levels along all roadways determined to have an Average Daily Traffic Volume (ADT) of greater than 2000 vehicles. Roadways with less than 2000 ADT generally do not generate noise at levels to be considered significant. The model input included traffic volume, vehicle mix (percent cars, medium trucks, and heavy trucks) and average vehicle speed. The model assumed "hard site" conditions that allows for a propagation loss of 3 dB(A) per doubling of distance. The model did not account for the effects of grade, stop and go conditions or the noise mitigation effects of intervening topography or barriers such as walls or buildings. The results are considered a worst case condition.

Tables 4 and 5 depict the existing and future (year 2010) roadway noise levels within the City of Lawndale. The tables identify the approximate distance in feet from the roadway centerline to the 60, 65, 70 and 75 CNEL contour. Figures B and C illustrate the approximate location of the contours. The contour lines show the unmitigated cumulative effect of all roadways. All of the modeled roadway segments generate a CNEL greater than 60 dB(A).

The accuracy of noise exposure predictions is generally no better than ± 3 dB(A). In the near vicinity of the source the accuracy may be within ± 1 dB(A), but, as the distance from the source increases the accuracy may fall to ± 5 dB(A). In addition, situations outside of normal conditions may go counter to the contour lines. For example, a building located adjacent to an elevated freeway may have higher noise levels at the upper floors than at ground level. Also, a row of houses can generally have a sound attenuation of as much as three to five decibels according to sound penetration studies. Walls or dense vegetation can further reduce noise levels.

Street Segment	Class*	ADT	Distances in Feet			
			75 dBA	70 dBA	65 dBA	60 dBA
Hawthorne Boulevard						
Rosecrans Ave.-147th St.	6M	49,000	-i	85	225	542
147th St.-Marine Avenue	6M	46,200	--	80	217	525
Marine Avenue-154th St.	6M	41,800	--	74	200	492
154th St.-Manhattan Beach Blvd.	6M	48,200	--	83	225	542
Manhattan Beach Blvd-I-405	6M	52,400	--	89	240	567
I-405-166th St.	8M	58,500	--	100	280	617
166th St.-170th St.	6M	57,400	--	96	258	600
170th St.-Redondo Beach Blvd	6M	55,000	--	93	250	590
Inglewood Avenue						
Rosecrans Ave-Marine Avenue	4M	25,900	--	--	156	344
Marine Avenue-I-405	4M	38,000	--	64	182	457
I-405-Manhattan Beach Blvd	4M	50,200	--	83	230	550
Manhattan Beach Blvd-162nd St	4M	40,400	--	68	192	475
162nd St.-Artesia Blvd	4M	35,100	--	60	169	429
Prairie Avenue						
Rosecrans Ave-Marine Avenue	4M	36,500	--	62	175	443
Marine Avenue-154th St	4M	31,200	--	53	153	394
154th St-Manhattan Beach Blvd	4M	35,400	--	60	171	436
Manhattan Beach Blvd-161st St	4M	31,400	--	53	157	394
161st St-166th St	4M	34,500	--	58	168	421
166th St-Redondo Beach Blvd	4M	35,200	--	59	169	429
Rosecrans Boulevard						
Inglewood Avenue-Firmona Avenue	6M	41,300	--	73	196	483
Firmona Avenue-Hawthorne Blvd	6M	40,100	--	72	193	475
Hawthorne Blvd-Prairie Avenue	6M	41,600	--	74	200	492
Marine Avenue						
I-405-Inglewood Avenue	4S	30,000	--	50	147	381
Inglewood Avenue-Hawthorne Blvd	4S	21,700	--	--	109	295
Hawthorne Blvd-Freeman Avenue	4S	22,600	--	--	114	306
Freeman Avenue-Prairie Avenue	4S	23,400	--	--	118	317
Manhattan Beach Boulevard						
Inglewood-I-405	4M	28,900	--	--	143	371
I-405-Hawthorne Blvd	4M	28,600	--	--	142	369
Hawthorne Blvd-Prairie Avenue	4M	22,500	--	--	114	306
166th Street						
West of Hawthorne Blvd	2LC	4,500	--	--	--	74
Hawthorne Blvd-Freeman Avenue	2C	3,200	--	--	--	51
Freeman-Prairie Avenue	2C	2,500	--	--	--	<50
Redondo Beach Boulevard						
Hawthorne Blvd-I-405	4M	25,100	--	--	125	333
I-405-Prairie Avenue	4M	23,000	--	--	116	311
Artesia Boulevard						
Inglewood Avenue-Firmona St	4M	46,600	--	77	217	525
Firmona-Redondo Beach Blvd	4M	48,300	--	79	225	542
I-405						
Redondo Beach Blvd-Hawthorne Blvd	8F	206,000	315	760	1600	--
Hawthorne Blvd-Inglewood Avenue	8F	221,000	363	790	1630	--

* Number = Number of lanes, M = Major, S = Secondary, C = Collector, LC = Local Collector. F = Freeway, I = 405

Note: The contours do not reflect the attenuating affects of topography or barriers such as walls and buildings. The sound level assumes a direct line-of-sight from the noise source to the receiver.

Lawndale Peak Period
Distance to Existing Noise Contours
table 4

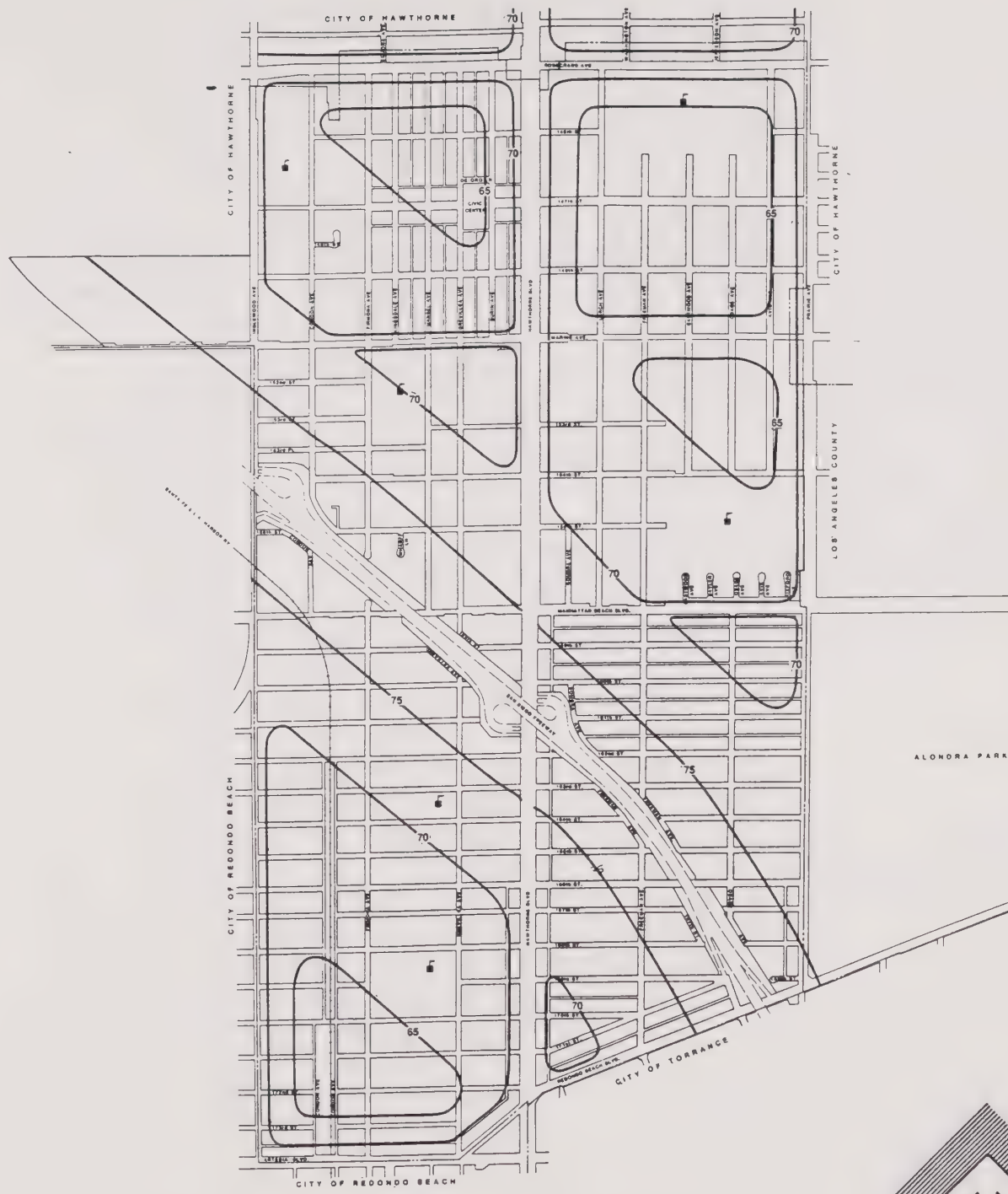
Street Segment	Class*	ADT	Distances in Feet			
			75 dBA	70 dBA	65 dBA	60 dBA
Hawthorne Boulevard						
Rosecrans Ave.-147th St.	6M	61255	53	109	276	637
147th St.-Marine Avenue	6M	57755	52	104	266	612
Marine Avenue-154th St.	6M	52254	--	97	245	575
154th St.-Manhattan Beach Blvd.	6M	60255	52	108	275	635
Manhattan Beach Blvd-I-405	6M	65505	55	114	290	660
I-405-166th St.	8M	73131	57	125	315	713
166th St.-170th St.	6M	71756	56	123	312	700
170th St.-Redondo Beach Blvd	6M	68756	55	118	300	683
Inglewood Avenue						
Rosecrans Ave-Marine Avenue	4M	32010	--	55	170	450
Marine Avenue-I-405	4M	46965	--	78	220	750
I-405-Manhattan Beach Blvd	4M	62043	--	100	275	637
Manhattan Beach Blvd-162nd St	4M	49931	--	82	230	550
162nd St.-Artesia Blvd	4M	43381	--	72	205	500
Prairie Avenue						
Rosecrans Ave-Marine Avenue	4M	45533	--	75	212	793
Marine Avenue-154th St	4M	38921	--	64	187	845
154th St-Manhattan Beach Blvd	4M	44160	--	72	205	505
Manhattan Beach Blvd-161st St	4M	39171	--	64	185	470
161st St-166th St	4M	43038	--	70	200	500
166th St-Redondo Beach Blvd	4M	43911	--	72	204	508
Rosecrans Boulevard						
Inglewood Avenue-Firmona St	6M	44162	--	78	205	509
Firmona St-Hawthorne Blvd	6M	42879	--	77	200	500
Hawthorne Blvd-Prairie Avenue	6M	44463	--	80	208	511
Marine Avenue						
I-405-Inglewood Avenue	4S	31488	--	52	150	398
Inglewood Avenue-Hawthorne Blvd	4S	22777	--	--	115	310
Hawthorne Blvd-Freeman Avenue	4S	23721	--	--	118	320
Freeman Avenue-Prairie Avenue	4S	24561	--	--	122	350
Manhattan Beach Boulevard						
Inglewood Avenue-I-405	4M	31884	--	52	155	402
I-405-Hawthorne Blvd	4M	31553	--	51	153	400
Hawthorne Blvd-Prairie Avenue	4M	24623	--	--	122	325
166th Street						
West of Hawthorne Blvd	2LC	5945	--	--	--	96
Hawthorne Blvd-Freeman Avenue	2C	4227	--	--	--	68
Freeman-Prairie Avenue	2C	3303	--	--	--	57
Redondo Beach Boulevard						
Hawthorne Blvd-I-405	4M	26602	--	--	133	350
I-405-Prairie Avenue	4M	24377	--	--	123	325
Artesia Boulevard						
Inglewood Avenue-Firmona St	4M	49389	--	80	225	550
Firmona St-Redondo Beach Blvd	4M	51191	--	83	230	560
I-405						
Redondo Beach Blvd-Hawthorne Blvd	8F	277900	420	890	1650	--
Hawthorne Blvd-Inglewood Ave	8F	279500	418	885	1640	--

* Number = Number of lanes, M = Major, S = Secondary, C = Collector, LC = Local Collector. F = Freeway, I = 405

Note: The contours do not reflect the attaining affects of topography or barriers such as walls and buildings. The sound level assumes a direct line-of-sight from the noise source to the receiver.

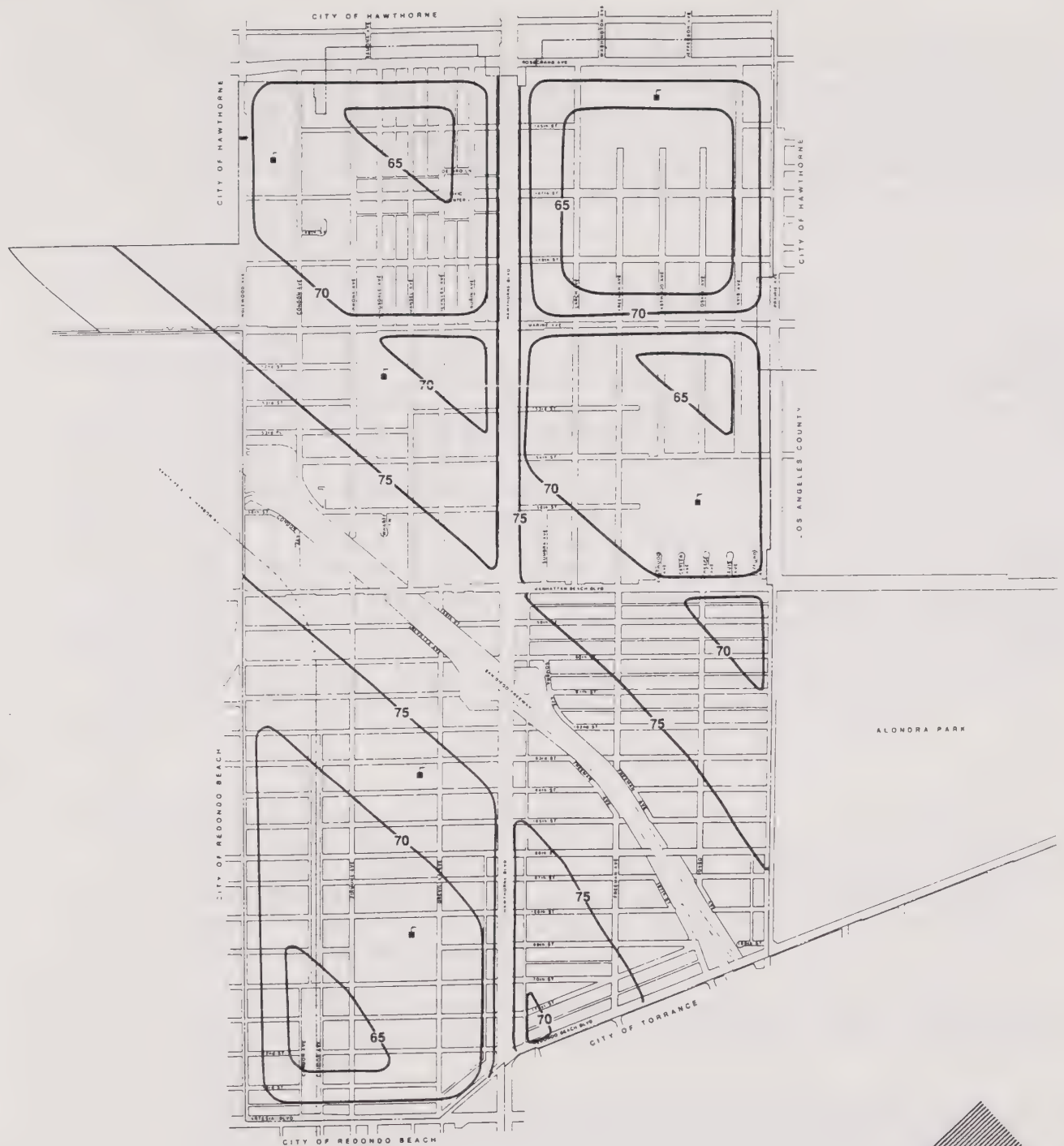
Lawndale Peak Period Distance to Future Noise Contours

table 5

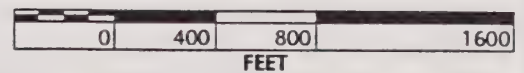


The contours reflect the cumulative effects of vehicular traffic noise. The attenuating effects of topography or barriers such as walls or buildings were not considered, see Table 2-1 for noise contours generated by a specific roadway.

Existing Noise Contours
figure B



The contours reflect the cumulative effects of vehicular traffic noise. The attenuating effects of topography or barriers such as walls or buildings were not considered, see Table 3-1 for noise contours generated by a specific roadway.



Future Noise Contours (Year 2010)

figure C

The difficulty with predicting precise noise levels at all locations within the City of Lawndale should not detract from the usefulness of the contour lines. The developed noise contours are considered to be a tool to be used by planners to identify areas that have significant noise levels. A site-specific acoustical analysis should always be conducted for noise sensitive developments whenever the predicted CNEL is greater than 60 dB(A) to comply with the interior and exterior noise standards.

Sound Level Measurements

A series of short-term (one-hour) sound level measurements were conducted along major roadways and near sensitive receptors to validate the results of the computer modeling and to approximate the noise environment in the community. All sound level measurements were conducted with a calibrated Larson-Davis Model 700 integrating sound level meter, which meets the American National Standards Institute (ANSI) requirements for a type 2 meter. The sound level meter was positioned at approximately 25 or 50 feet from the roadway centerline and at height of 5 feet above the ground to approximate the height of the human ear. All sound level measurements conducted along major roadways were taken at peak traffic hours (6:00 a.m. to 9:00 a.m. or 3:00 p.m. to 6:00 p.m.). The results of sound level measurements during peak traffic hours are generally consistent with the estimated CNEL. Sound level measurements conducted in other noise sensitive areas, such as next to schools or parks, were conducted between 9:00 a.m. and 3:00 p.m. The measurement period reflects the hours of primary usage for such land uses. Tables 6 and 7 summarize the results of the sound level measurements. Figure D identifies the location of the sound level measurements.

Rail

Atchison Topeka and Santa Fe

The Atchison Topeka and Santa Fe railroad operates on the north-south track located east of Inglewood Avenue. The stretch of land bordering the Santa Fe railway line from Artesia Boulevard to Manhattan Beach Boulevard is a high noise zone. The area from Artesia Boulevard to 170th Street has been subject to a number of mitigatory measures:

A 6-foot block wall separates the homes that border the western railroad right-of-way; the land adjacent to the railway line is designated a parkway and landscaping has been installed.

Railroad volumes were obtained from the San Bernardino office of the Santa Fe Railroad. Typically two freight train operations occur daily, Monday through Saturday: one southbound trip between 8:00 p.m. and 9:00 p.m. and one northbound trip between 1:30 a.m. and 3:00 a.m. Each train is estimated to have 75 to 100 cars. One single switcher car operation occurs between 6:30 p.m. and 9:00 p.m., Monday through Friday. One single light engine typically runs on Sunday night.

The train traffic noise was calculated using a model developed by Wyle Laboratories (Assessment of Noise Environments Around Railroad Operations, July 1973). The contour distances are summarized in Table 8. The model did not account for the effects of intervening topography or barriers such as walls. The results depict a worst case condition. No significant change in the operations parameters are expected for the year 2010; therefore, significant changes to the future community noise exposure levels are not expected.

Measurement Location	L _{eq}	L ₁₀	L ₅₀	L ₉₀	L _{max}	L _{min}
Inglewood Avenue between Marine Avenue and 149th Street	69.4	72.0	67.5	61.5	86.0	57.0
Rosecrans Avenue east of Washington Avenue	61.8	74.5	70.5	64.5	80.5	55.0
Prairie Avenue at 148th Street	69.9	73.5	68.0	60.5	80.0	52.0
Manhattan Beach Boulevard at Osage Avenue	70.0	73.0	68.0	61.0	81.5	54.5
Hawthorne Boulevard north of Manhattan Beach Boulevard	73.3	76.0	71.5	65.5	83.5	62.0
Marine Avenue at Grevillea Avenue	72.9	76.0	71.0	61.0	90.0	55.0
166th Street east of Hawthorne Boulevard	60.0	64.5	56.4	54.0	75.5	51.5
Redondo Beach Boulevard east of Hawthorne Boulevard	69.4	73.0	67.0	58.0	84.5	52.5
Artesia Boulevard east of Kingsdale Avenue	70.6	73.0	69.0	64.0	84.0	54.5
Inglewood Avenue north of Manhattan Beach Boulevard	71.6	73.0	69.0	63.0	86.0	56.5
Inglewood Avenue north of 168th Street	69.6	73.0	66.5	58.0	84.0	50.0
* Condon Avenue south of 154th Street adjacent to I-405	65.6	67.5	65.0	62.5	71.0	58.5
* Grevillea Avenue at 160th Street adjacent to I-405	65.8	68.0	65.0	62.5	72.5	55.5
* 168th Street at 167th Street adjacent to I-405	65.1	66.5	64	62.5	71.0	57.0

Peak Hour Sound Level Measurements (dB(A))

table 6

Measurement Location	L _{eq}	L ₁₀	L ₅₀	L ₉₀	L _{max}	L _{min}
* 168th Street at Osage Avenue adjacent to I 405 (Frank T. Hogan Park)	70.1	71.0	68.5	67.0	73.5	62.5
* Grevillea Avenue and 159th Street adjacent to I-405	62.4	64.5	61.5	59.4	70.5	57.5
Hawthorne Blvd. at 167th Street	74.1	78.0	72.0	62.0	85.0	56.5
Marine Avenue at Osage Street	69.9	72.5	67.5	60.5	79.5	56.5
Manhattan Beach Blvd. at Firmona Street	69.1	72.0	67.5	62.5	79.5	57.5

One hour sound level measurements conducted during peak traffic period (6:00 a.m.–9:00 a.m. or 3:00 p.m.–6:00 p.m.).

Measurements were conducted at approximately 50 feet from the roadway centerline.

* Measurements were conducted at approximately 50 feet from the edge of I-405. The measurement site was located 25 feet or more below I-405.

Peak Hour Sound Level Measurements (dB(A))

table 6 (continued)

Measurement Location	L _{eq}	L ₁₀	L ₅₀	L ₉₀	L _{max}	L _{min}
147th Street at Freeman Avenue adjacent to Lawndale School District	57.6	62.0	53.0	46.5	71.0	44.0
Grevillea Avenue at De Oro Lane adjacent to Smith School	54.1	56.0	53.0	50.5	62.0	48.0
Mansel Avenue at 153th Street adjacent to Jane Addams School	58.6	61.5	55.5	52.5	72.5	51.0
Firmona Street at 169th Street adjacent to William Green Park	53.9	57.5	49.0	42.5	70.5	40.0
Grevillea Avenue at 164th Street adjacent to Masada CDC	57.0	63.0	55.0	48.0	70.5	45.0
Prairie Avenue at 162nd Street adjacent to Golf Course*	68.0	71.0	66.0	62.5	75.0	55.0
154th Street at Osage Avenue adjacent to Will Rogers School	58.3	62.5	49.0	44.0	74.5	40.0
Osage Avenue at 162nd Street	58.4	61.0	55.5	51.0	75.5	48.5
Freeman Avenue at 163rd Street adjacent to I-405	59.2	60.5	58.5	57.0	55.5	55.0
162nd Street at Condon Avenue	58.1	62.0	54.0	49.0	78.5	44.5

One hour sound level measurements conducted during peak traffic period (6:00 a.m.–9:00 a.m. or 3:00 p.m.–6:00 p.m.).

* Measurements were conducted approximately 25 feet from the roadway centerline.

Daytime Sound Level Measurements (dB(A))

table 7

Table 8

RAILROAD OPERATIONS NOISE CONTOURS

	Community Noise Equivalent Level (CNEL)			
	75	70	65	60
Approximate Distance in Feet to CNEL contour	--	50	160	500

Green Line

In addition to the noise generated by the AT&SF, the Los Angeles County Transportation Commission is proposing an extension of the Green Line. The proposed south segment begins at Space Park and turns through the AT&SF right-of-way southeasterly to Manhattan Beach Boulevard, then east in the median of Manhattan Beach Boulevard and along the southwest embankment of I-405 and finally entering the median of Hawthorne Boulevard at the freeway interchange. An aerial guideway is proposed for the median of Hawthorne Boulevard. According to the Route Refinement Study, Coastal Corridor Rail Transit Project, South Segment, May 1990 the typical noise exposure from the Green Line is expected to range from 66.8 to 68.2 CNEL.

The Green Line also proposes to construct a station at Hawthorne Boulevard and 166th Street to serve Lawndale and the surrounding communities. The station would be located in the median along Hawthorne Boulevard. Surrounding land uses are primarily commercial along Hawthorne Boulevard, and residential to the east and west. In addition, there would be a recessed bus bay for northbound buses on Hawthorne Boulevard and an area for short-term parking for about 30 cars. No information is currently available on the expected noise generated at the station.

Airports

The City of Lawndale has no airport or helipad within its boundary. The closest airports are Hawthorne Municipal Airport located approximately 1.5 miles to the northeast and Los Angeles International Airport located approximately 4 miles to the northwest. The City of Lawndale is well outside the airport's 60 dB(A) CNEL contour and is not significantly affected by aircraft noise. No significant changes are expected for the year 2010.

Commercial and Industrial

The noise level associated with an industrial and commercial land use varies with the type of businesses and the distance from the noise source. Little benefit is to be gained by attempting to quantify the noise at each business. Therefore, a summary of potentially significant noise generating commercial and industrial areas will be described. A site-specific noise study is recommended whenever a noise sensitive development is proposed to be located next to a commercial or industrial noise generator.

Noise associated with industrial and commercial land uses within the City of Lawndale is limited. Light industrial land uses are primarily concentrated to the areas bounded by Manhattan Beach Boulevard on the south, I-405 on the east and north, and Inglewood Avenue on the west; and by 153rd Street on the south, Hawthorne Boulevard on the east, Marine Avenue on the north and Manual Avenue on the west. Commercial land uses are located primarily next to Hawthorne Boulevard, Inglewood Avenue, Prairie Avenue, Rosecrans Avenue, Marine Avenue, Manhattan Beach Boulevard and Artesia Boulevard. The business are generally associated with home improvement, automobile repair and sales, food service, and shopping centers. Residential noise receptors are located next to many light industrial and commercial businesses. The City Planning Department does not have a record of citizen complaints from industrial or commercial noise sources. No heavy industrial sources were identified. In the year 2010 the commercial and industrial areas are expected to be similar to its present form.

Goals and Policies

The following goals and policies emphasize the control and abatement of noise through standards, site planning, and noise mitigation.

Noise Goal 1 To achieve and maintain an environment which is free from excessive or harmful noise through identification, control and abatement.

Policies

Policy 1a

Control and abate undesirable sounds through the development of land use compatibility guidelines and a noise ordinance.

Policy 1b

Encourage the development of industrial and commercial land uses which do not produce excessive noise.

Policy 1c

Discourage development of noise sensitive land uses in area impacted by high noise levels.

Policy 1d

Ensure that sensitive land uses are not subjected to inappropriate noise levels resulting from transportation systems.

Policy 1e

Maintain coordination of noise control policies and standards with the surrounding cities and Caltrans.

Policy 1f

Provide for implementation, periodic review and revision of the Noise Element.

Policy 1g

Provide for the education of the community in the nature and extent of noise in the City of Lawndale.

Implementation Programs

1.1 Comprehensive Noise Ordinance Adoption

Adopt a comprehensive noise ordinance to prohibit unwanted and unnecessary sound. The ordinance shall identify acceptable property line sound level limits and control noise sources such as barking dogs, mechanical equipment, amplified music, construction activity and other noise identified as disturbing, excessive or offensive.

1.2 Noise Compatibility Standards

Adopt the land use noise compatibility standards presented in Figure A for general planning and zoning purposes.

1.3 Noise Insulation Standards

Enforce the California Administrative Code, Title 24, Noise Insulation Standards. Title 24 requires that an acoustical analysis be performed for all new multi-family construction in areas where the exterior sound level exceeds 60 CNEL. The analysis shall ensure that the building design limits the interior noise environment to 45 CNEL or below.

1.4 Noise Insulation Standards for Single-Family Dwellings

Adopt a policy or implementation ordinance making California Administrative Code, Title 24, Noise Insulation Standards applicable to new single-family dwellings.

1.5 Project Review

Review actions or projects that may have the potential to generate noise impacts which may impact existing land uses.

1.6 Acoustical Analysis

Require noise studies for projects where exterior noise levels exceed 60 dB CNEL to identify potential noise impacts, analyze mitigation alternatives, and identify methods to monitor the effectiveness of the mitigation following implementation.

1.7 Transportation Noise Standards

Develop noise standards for use in reviewing the construction and improvement of any roadway, railroad, or other transit system.

1.8 Enforce Motor Vehicle Code

Enforce the provisions of the State Motor Vehicle Code which requires that all vehicles be equipped with a properly maintained muffler and that the exhaust system not be modified.

1.9 Regulate Traffic Flow

Review traffic flow systems and synchronize signals to avoid traffic stops which produce excessive noise wherever possible.

1.10 Limit Truck Noise

Limit truck traffic in noise sensitive areas.

- Increasing the distance from the noise source to sensitive receptors by creation of setbacks;
- Placing non-noise sensitive uses such as parking lots and utility areas between the noise source and receiver; and
- Orient usable outdoor living space such as balconies, patios, and children play areas away from roadways.

Barriers

Noise barriers such as walls and earthen berms are commonly used to mitigate noise from ground transportation and industrial sources. Noise barriers can be used to reduce the noise level both outdoors and indoors. The effectiveness of a barrier depends upon factors such as the relative height of the barrier relative to the line-of-sight from the source to the receiver, the distance from the barrier to the source and to the receiver and the reflections of sound. To be effective, a barrier must block the line-of-sight from the source to the receiver. A barrier must also be of solid construction (i.e masonry) without holes or gaps and be long enough to prevent sound from passing around the ends. Under the best of circumstances, a properly designed noise barrier can reduce noise as much as 15 decibels. A site-specific acoustical analysis is required to determine the proper height and placement of a barrier.

A row of houses or other buildings may act as a barrier. A row of one- or two-story houses (with about 30 percent open gaps) provides a barrier attenuation of approximately 3 to 5 decibels; two rows of houses, 6 to 10 decibels; and three or more rows of houses, 10 to 12 decibels.

Building Design

The location of a building on its site, the arrangement of rooms, and the location of doors and windows all have a bearing on interior noise control. The sides of a building which face a roadway or other noise source should house those activities that can tolerate the greatest amount of noise. Noise sensitive areas include bedrooms, living rooms and dens. Less noise sensitive areas may include kitchens and bathrooms. Hallways, closets and storage rooms are generally not noise sensitive.

Indoor noise levels are controlled by the noise reduction characteristics of the building shell. In general, doors and windows are the acoustical weak link in a building. Therefore, careful consideration should be given to there placement. By limiting the number and size of these openings on the sides of the building exposed to noise, interior noise levels will be reduced.

Often it is necessary to allow for a closed window condition to control interior noise. When this occurs an alternative means of ventilation such as heat pumps or forced air units are required to meet the Uniform Building Code requirements. Heavy pane or double-pane windows are frequently required to increase the sound insulation within a room. Doors facing a noise source should be solid core and should be equipped with an appropriate gasket.

Definitions

A-Weighted Sound Level (dBA): An A-Weighted sound level is the sound pressure level in decibels as measured on a sound level meter using the A-Weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and provides good correlation with subjective reactions to noise.

Ambient Noise: The composite of noise from all sources near and far. In this context, ambient noise levels constitutes the normal or existing level of environmental noise at a given location.

CNEL: Community Noise Equivalent Level. The average equivalent A-Weighted sound level during a 24-hour day, obtained after addition of 5 decibels to sound levels in the evening (7:00 p.m. to 10:00 p.m.), and 10 decibels to sound levels in the night (10:00 p.m. to 7:00 a.m.). CNEL represents daily levels of noise exposure averaged on an annual basis.

Decibel, dB: A unit of measure describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

L₁₀: The sound level exceeded 10 percent of the time during a given period.

L₅₀: The sound level exceeded 50 percent of the time during a given period.

L₉₀: The sound level exceeded 90 percent of the time during a given period.

Ldn: Day-Night Average Sound Level. The average equivalent A-Weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the evening (10:00 p.m. to 7:00 a.m.). Ldn represents daily levels of noise exposure averaged on an annual basis.

Leq: Equivalent sound level. The sound level corresponding to a steady state sound level containing the same total energy as a time varying signal over a given sample period. Leq is typically computed over 1-, 8-, or 24-hour sample periods.

Lmax: The greatest A-Weighted sound level measured during a designated period.

Lmin: The lowest A-Weighted sound level measured during a designated period.

Noise Contours: Lines drawn about a noise source showing constant levels of noise exposure. This Element uses the CNEL or Ldn metrics to describe noise exposure contours.

Noise Sensitive Uses: Noise sensitive uses are land uses associated with indoor and/or outdoor human activities that may be subject to stress and/or significant interference from noise. They include residential (single and multi-family dwellings, mobile home parks, dormitories and similar uses); transient lodging (including hotels, motels, and similar uses); hospitals, nursing homes, convalescent hospitals, and other facilities for long term medical care; and public or private educational facilities, libraries, churches, and other places of public gathering.

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